



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**BREAKING THE ICE: POTENTIAL U.S.-RUSSIAN
MARITIME CONFLICT IN THE ARCTIC**

by

Mate Wesley Aerandir

December 2012

Thesis Advisor:
Second Reader:

David S. Yost
L. Tim Unrein

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

| | | | | |
|---|---|--|--|--|
| REPORT DOCUMENTATION PAGE | | | <i>Form Approved OMB No. 0704-0188</i> | |
| Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503. | | | | |
| 1. AGENCY USE ONLY (Leave blank) | | 2. REPORT DATE December 2012 | 3. REPORT TYPE AND DATES COVERED Master's Thesis | |
| 4. TITLE AND SUBTITLE Breaking the Ice: Potential U.S.-Russian Maritime Conflict in the Arctic | | | 5. FUNDING NUMBERS | |
| 6. AUTHOR(S) Mate Wesley Aerandir | | | | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000 | | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A | | | 10. SPONSORING/MONITORING AGENCY REPORT NUMBER | |
| 11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol Number: N/A | | | | |
| 12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited | | | 12b. DISTRIBUTION CODE | |
| 13. ABSTRACT (maximum 200 words) While war in the Arctic appears unlikely at present, this thesis analyzes why an escalation of territorial and resource disputes in the Arctic up to and including the use of force cannot and should not be ruled out. This thesis examines the political, economic, and military interests of the main Arctic powers—Canada, Denmark, Norway, Russia, and the United States—to set the scene for an assessment of the factors that could make for cooperation or conflict. Advocates of a “Pax Arctica” involving regional cooperation underrate the more pragmatic and competitive factors underlying international relations and the actual limits of international institutions and economic interdependence in restraining behavior in an anarchic system. The potential for U.S.-Russian maritime conflict in the region is genuine. Based on the methodology established for this analysis, it can be reasonably assessed that conflict in the Arctic is likely. No time horizon can be determined, however, because much depends on decisions made (or not made) by these same Arctic powers in the coming decades. | | | | |
| 14. SUBJECT TERMS Arctic, Conflict, Economic Interdependence, International Institutionalism, Threat, Economic Warfare, Navy, Coast Guard, United States, Russia, Canada, Denmark, Norway, China, Japan, United Nations Convention on the Law of the Sea, UNCLOS, Commission on the Limits of the Continental Shelf, CLCS, NATO, NATO-Russia Council, NRC, Arctic Council, Hydrocarbon, Oil, Gas, Arms Race | | | 15. NUMBER OF PAGES 141 | |
| | | | 16. PRICE CODE | |
| 17. SECURITY CLASSIFICATION OF REPORT Unclassified | 18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified | 19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified | 20. LIMITATION OF ABSTRACT UU | |

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

**BREAKING THE ICE: POTENTIAL U.S.-RUSSIAN
MARITIME CONFLICT IN THE ARCTIC**

Mate Wesley Aerandir
Lieutenant, United States Navy
B.A., University of Washington, 2005

Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(EUROPE AND EURASIA)**

from the

**NAVAL POSTGRADUATE SCHOOL
December 2012**

Author: Mate Wesley Aerandir

Approved by: Dr. David S. Yost
Thesis Advisor

CDR L. Tim Unrein, USN
Second Reader

Dr. Harold Trinkunas
Chair, Department of National Security Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

While war in the Arctic appears unlikely at present, this thesis analyzes why an escalation of territorial and resource disputes in the Arctic up to and including the use of force cannot and should not be ruled out. This thesis examines the political, economic, and military interests of the main Arctic powers—Canada, Denmark, Norway, Russia, and the United States—to set the scene for an assessment of the factors that could make for cooperation or conflict. Advocates of a “Pax Arctica” involving regional cooperation underrate the more pragmatic and competitive factors underlying international relations and the actual limits of international institutions and economic interdependence in restraining behavior in an anarchic system. The potential for U.S.-Russian maritime conflict in the region is genuine. Based on the methodology established for this analysis, it can be reasonably assessed that conflict in the Arctic is likely. No time horizon can be determined, however, because much depends on decisions made (or not made) by these same Arctic powers in the coming decades.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

| | | |
|-------------|--|-----------|
| I. | INTRODUCTION..... | 1 |
| A. | MAJOR RESEARCH QUESTION..... | 1 |
| B. | IMPORTANCE..... | 2 |
| C. | PROBLEMS AND HYPOTHESES | 2 |
| D. | LITERATURE REVIEW | 5 |
| E. | METHODOLOGY AND SOURCES..... | 10 |
| II. | IDENTIFYING THE THREAT | 15 |
| A. | WHY NOW?..... | 16 |
| B. | OPPORTUNITY | 17 |
| 1. | Staking Claims | 21 |
| 2. | Disputed Areas | 21 |
| a. | <i>The Lomonosov Ridge – Canada, Denmark, and Russia.....</i> | <i>22</i> |
| b. | <i>The Bering Strait – Russia and the United States</i> | <i>27</i> |
| c. | <i>The Beaufort Sea – Canada and the United States</i> | <i>29</i> |
| d. | <i>The Northwest Passage – Canada and the United States.....</i> | <i>31</i> |
| e. | <i>Hans Island – Canada and Denmark</i> | <i>38</i> |
| 3. | Summary..... | 39 |
| C. | CAPABILITY | 40 |
| 1. | Arctic Orders of Battle and Comparative Capabilities Analysis .. | 43 |
| 2. | Projected Capability Needs Assessment | 46 |
| 3. | Summary..... | 48 |
| D. | INTENT | 48 |
| 1. | Indications of Threat and Use of Force..... | 49 |
| a. | <i>The United States v. Russia</i> | <i>49</i> |
| b. | <i>Russia v. Japan</i> | <i>50</i> |
| c. | <i>Japan v. China</i> | <i>51</i> |
| d. | <i>China v. Vietnam, the Philippines, Malaysia, and Brunei....</i> | <i>53</i> |
| 2. | Indications of Intent to Use Force | 54 |
| a. | <i>Russia’s Motivation.....</i> | <i>54</i> |
| b. | <i>The NATO Perspective.....</i> | <i>56</i> |
| 3. | Summary..... | 58 |
| E. | CONCLUSION | 59 |
| III. | MITIGATING FACTORS?..... | 63 |
| A. | CONFLICT RESOLUTION MECHANISMS AND FORA..... | 65 |
| 1. | The UNCLOS | 66 |
| a. | <i>Background.....</i> | <i>66</i> |
| b. | <i>Peaceful Dispute Resolution Mechanisms.....</i> | <i>68</i> |
| c. | <i>Limitations of the UNCLOS</i> | <i>69</i> |
| 2. | NATO-Russia Council..... | 70 |
| a. | <i>Background.....</i> | <i>70</i> |
| b. | <i>Peaceful Dispute Resolution Mechanisms.....</i> | <i>71</i> |

| | | |
|-----|--|-----|
| | <i>c. Limitations of the NRC</i> | 72 |
| 3. | The Arctic Council..... | 74 |
| | <i>a. Background</i> | 74 |
| | <i>b. Peaceful Dispute Resolution Mechanisms</i> | 75 |
| | <i>c. Limitations of the Arctic Council</i> | 76 |
| 4. | Summary..... | 77 |
| B. | ECONOMIC INTERDEPENDENCE | 78 |
| 1. | Potential for a Capitalist Peace?..... | 80 |
| 2. | Past Precedent as a Deterrence for FDI and Interdependence..... | 82 |
| 3. | A Case Study: The Sino-Japanese East China Sea Dispute..... | 85 |
| 4. | Summary..... | 87 |
| D. | CONCLUSION | 88 |
| IV. | CONCLUSION | 91 |
| A. | SUMMARY OF THE THREAT | 91 |
| B. | ANALYZING THE EQUATION..... | 94 |
| 1. | Degree of Economic Dependence on Hydrocarbon Resources in the Arctic (and Elsewhere) | 95 |
| 2. | Value of Contested Claims | 96 |
| 3. | Ability to Defend Claims | 98 |
| 4. | Historical Propensity for Militarized Conflict | 100 |
| 5. | Role of International Institutions | 101 |
| 6. | Degree of Economic Interdependence..... | 101 |
| C. | CONFLICT IN THE ARCTIC..... | 103 |
| 1. | Potential for Maritime Conflict in the Arctic..... | 104 |
| 2. | Why the United States Should Care: Recommendations for Policy and Action | 104 |
| 3. | When Will the Ice Break? | 106 |
| | LIST OF REFERENCES | 109 |
| | INITIAL DISTRIBUTION LIST | 123 |

LIST OF FIGURES

| | | |
|------------|---|----|
| Figure 1. | Decline in Sea Ice Extent, September 1979 to 2012..... | 18 |
| Figure 2. | Territories and Claims within the Arctic Circle..... | 23 |
| Figure 3. | Assessment Units (AUs) in the Circum-Arctic Resource Appraisal (CARA). Color-coded by assessed probability of the presence of at least one undiscovered oil and/or gas field with recoverable resources greater than 50 million barrels of oil equivalent (MBOE). Probabilities are based on the entire area of the AU, including any parts south of the Arctic Circle... | 25 |
| Figure 4. | U.S.-Russian Maritime Boundary and Exclusive Economic Zones | 28 |
| Figure 5. | Area of Disputed U.S. and Canadian Claims in the Beaufort Sea | 29 |
| Figure 6. | Canadian Oil and Gas Exploration and Exploitation Lots in the Beaufort Sea..... | 31 |
| Figure 7. | The Northwest Passage (Red/Bottom) and Northeast Passage (Green/Top)... | 32 |
| Figure 8. | Canadian Baselines Enclosing Its Archipelagic Waters | 34 |
| Figure 9. | Hans Island..... | 39 |
| Figure 10. | Disputed Islands and Waters in the East China Sea | 51 |
| Figure 11. | Disputed Islands and Waters in the South China Sea | 53 |

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

| | | |
|----------|---|-----|
| Table 1. | Aerandir Conflict Assessment Matrix. The likelihood of maritime conflict in the arctic, assessed as a cumulative score of six factors. Values are assigned (see Table 2, Aerandir Conflict Assessment Index) and likelihood is assessed in the conclusion. | 12 |
| Table 2. | Aerandir Conflict Assessment Index. Summary of scores assigned to Russia and the United States based on the extent to which identified factors contribute to the likelihood of maritime conflict in the Arctic. | 103 |
| Table 3. | Aggregate Assessment of Likelihood of Conflict (ref. Table 1). | 103 |

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|--------|---|
| AEPS | Arctic Environmental Protection Strategy |
| ARC | Arctic Research and Development Center for Offshore Development |
| AU | Assessment Unit |
| CARA | Circum-Arctic Resource Appraisal |
| CEO | Chief Executive Officer |
| CFE | Conventional Armed Forces in Europe |
| CIA | Central Intelligence Agency |
| CLCS | Commission on the Limits of the Continental Shelf |
| EC | European Community |
| EEZ | Exclusive Economic Zone |
| ETH | Center for Strategic Studies |
| EU | European Union |
| FDI | Foreign Direct Investment |
| GDP | Gross Domestic Product |
| IHS | Information Handling Service |
| IOC | International Oil Company |
| ISN | International Relations Security Network |
| JCG | Japanese Coast Guard |
| KV | <i>Kystvakten</i> [Norwegian: Coast Guard] |
| LNG | Liquefied Natural Gas |
| LOST | Law of the Sea Treaty |
| MAP | Membership Action Plan |
| MBOE | Million Barrels of Oil Equivalent |
| NATO | North Atlantic Treaty Organization |
| NORAD | North American Aerospace Defense Command |
| NRC | NATO-Russia Council |
| SALT | Strategic Arms Limitation Talks |
| SAR | Search and Rescue |
| SDWG | Sustainable Development Working Group |
| SS | Steam Ship |
| START | Strategic Arms Reduction Treaty |
| TNK-BP | Tyumen Neftegaz Company-British Petroleum |
| UN | United Nations |
| UNCLOS | United Nations Convention on the Law of the Sea |
| USCGC | United States Coast Guard Cutter |

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

I dedicate this thesis to my shipmates past, present, and future for whom I strive daily to succeed in all my endeavors so that I can position myself to be a better leader, a sharper analyst, and a more effective officer.

I would like to acknowledge and honor Dr. David Yost for his time, dedication, guidance, advice, and mentorship as I confronted this academic challenge. His insight, meticulousness, and interest in my research kept me on track and set me up for success. I could not have asked for a better thesis advisor, and I am eternally grateful for your tutelage.

Secondly, I would like to thank Dr. Robert Weiner for his assistance in getting me started on this thesis and helping me focus my research question, develop a literature review, and craft my proposal; and to CAPT Jennith Hoyt and CDR Tim Unrein for their guidance and insight from a naval intelligence and policy perspective. To Dr. Nazneen Barma, thank you for your assistance in directing me to certain research databases and for your contagious enthusiasm for economics. Finally, I would like to extend an enormous thank you to Dr. Mikhail Tsypkin for teaching me the intricacies of the Russian narrative.

Last but not least, I would like to acknowledge LT Nathaniel Hayes and his wife Yasmine, LT Lucas Seeger, LCDR Ken Scott, and 2Lt Kellan Bethke for keeping me motivated when I doubted myself, for keeping me sane when I was under tremendous pressure (internally and externally inflicted), and for being a sounding board for my ideas and arguments throughout the course of my studies at the Naval Postgraduate School. To all my other friends and family, thank you for your virtual support. I absolutely could not have finished this thesis without your encouragement and pride in my accomplishments.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

“Launching land wars to seize resources is no longer seen as acceptable, but a grab for resources at sea may be a different matter.”

—Nikolas Gvosdev,
Professor of National Security Studies,
U.S. Naval War College¹

A. MAJOR RESEARCH QUESTION

International organizations for peace such as the United Nations were originally chartered to prevent the outbreak of conflict by providing channels of dispute mediation and adjudication with legally binding authority. In contemporary politics, however, states are increasingly appealing to these fora only as a means of legitimizing their right to counter a threat militarily and less as an opportunity for conflict mediation and resolution.

This thesis investigates the hypothesis that international institutions and economic interdependence may prove to be insufficient means of threat reduction insofar as U.S. relations with Russia in the Arctic are concerned. Since this hypothesis appears to be well-founded, it is necessary to explore what types of militarized conflict could be expected in the Arctic if diplomacy failed. With this information, more realistic policy measures might be implemented to address a shockingly weak U.S. position in Arctic matters, including diplomatic, military, and economic issues. While not assigning an expected timeframe or event horizon for such an outcome, this thesis seeks to examine (a) what factors could increase the risk of a U.S.-Russian maritime conflict in the Arctic, and (b) what measures the United States—and the U.S. Navy in particular—might take to be prepared for deterrence and defense in such an eventuality.

For the purposes of the argument at hand, conflict shall be defined as a dispute over interests that involves or could involve the threat, display, or use of military or police force in the process of its resolution up to, but not including, a formal declaration

¹ Nikolas Gvosdev, as quoted by Peter Apps, “Geopolitics, Resources Put Maritime Disputes Back on Map,” *Reuters*, October 1, 2012, <http://www.reuters.com/article/2012/10/01/us-maritime-disputes-idUSBRE8900BG20121001>.

of war. Therefore, when discussing the likelihood of maritime conflict, “war” is explicitly not implied. Herein, conflict is also synonymous with a militarized interstate dispute.

B. IMPORTANCE

Climate change is dramatically and rapidly transforming the geography of the planet, and what was once the subject of legends and myth is becoming reality. As the Arctic ice cap has receded, the long sought-after “Northwest Passage” has become more easily navigable, opening the path for more cost-effective commercial shipping routes and allowing easier exploration for, and exploitation of, natural resources in a formerly inhospitable and inaccessible region. Nations bordering the Arctic Ocean will not only seek to regulate maritime traffic in their respective territorial waters and economic zones, but also to expand their exclusive economic claims in a “maritime land grab” for control of the wealth of potential natural resources that are assessed to be located there. The risk of conflict in the Arctic has never been greater, and this promises to increase the significance of maritime capabilities, including naval forces.

With respect to the defense of vital national interests, be they issues of sovereignty, resources, or influence, it is axiomatic that a responsible and prudent government plans and executes strategy, and operates forces, based on assessments of capabilities as well as perceived intentions. Measures to counter a potential adversary’s capabilities should therefore take priority in policy formulation and implementation. In this regard, this thesis analyzes the extent to which the United States and its allies are able to address the potential threat posed by Russian Arctic capability.

Intentions are generally much harder to gauge than capabilities. Strategic communications—including public statements by political figures and purposeful actions designed to demonstrate resolve—are therefore all the more important as indicators of an adversary’s objectives.

C. PROBLEMS AND HYPOTHESES

While the United States and Russia (formerly under the flag of the Union of Soviet Socialist Republics) have maintained a constant maritime presence in the Arctic

region since the Cold War, most activity has been limited to scientific research, icebreaking support, and subsurface patrols. With the exception of the latter, the extent of the Arctic ice shelf (as it varied minimally from year to year) created a natural northern maritime “border” of sorts, and the Arctic Pole, like the Antarctic, assumed a militarily neutral status; a ship-on-ship naval battle was highly unlikely, if not impossible, at the time due primarily to simple geophysical limitations. There was no interest or reason politically to defend any specified lines beyond the ice’s edge. As these natural borders recede, however, and underwater resources are discovered and tapped for their economic value, political and economic claims—backed by naval presence, capability, and historical tensions—increase the likelihood of armed confrontations in this new maritime frontier. Moreover, the United States and Russia are not the only stakeholders with a legitimate claim to this potential treasure trove. Canada, Denmark (responsible for the security of Greenland), and Norway, too, are strategically positioned to play major roles in this theater of operations.

The circular geography of the Arctic leaves these five nations arrayed such that multiple disputes remain unsettled to this day. If left unresolved, the risk of low intensity, militarized interstate disputes could increase—especially where Russia is concerned. While Russia has signed, and thus far observed, accords with both the United States² and Norway³ to delimit overlapping exclusive economic zones (EEZ), the former agreement has yet to be ratified by the Russian legislature.⁴ Such diplomatic ambiguity can, and indeed, does, often result in militarized disputes involving economic actors as much as—or more than—military units. This is discussed in greater detail in Chapter II, but suffice

² United Nations, “Agreement between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary,” June 1, 1990, <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/USA-RUS1990MB.PDF>.

³ United Nations, “Treaty between the Kingdom of Norway and the Russian Federation Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean,” September 15, 2010, <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/NOR-RUS2010.PDF>.

⁴ Ronald O’Rourke, *Changes in the Arctic: Background and Issues for Congress*, CRS Report for Congress, June 15, 2012 (Washington, DC: Congressional Research Service, 2012), <http://www.fas.org/spp/crs/misc/R41153.pdf>, 14. President George H.W. Bush signed the Agreement on June 1, 1990 and submitted it to the Senate for ratification on September 26, 1990 as Senate Treaty Document 101–22. The U.S. Senate gave its advice and consent to ratification on September 16, 1991.

it to say that the need to adequately enforce and defend the boundaries established in these accords is highlighted by the historical propensity of both Russia and the United States to seize, sink, and/or otherwise harass maritime vessels operating in what they unilaterally recognizes as their EEZ. A primary example is the on-going dispute between Russia and Japan over contested EEZ boundaries and fishing rights in the Sea of Japan.⁵ The U.S. Coast Guard, meanwhile, has been involved in several altercations involving Russian commercial fishing vessels poaching in the U.S.-claimed waters of the Bering Sea.

It is important to remember that, through the North Atlantic Treaty, the United States is committed to mutual defense and cooperation with its Arctic allies, leaving Russia alone to defend its interests in the Arctic. The United States is also allied with Canada through the North American Aerospace Defense (NORAD) treaty. While these alliances are generally characterized as strong and enduring, territorial disputes between members could weaken political solidarity and undermine the ability of these organizations to address common external threats. Factors contributing to a potential maritime conflict between the United States and Russia will be assessed in isolation and in conjunction with U.S. relations with other NATO members. In other words, several Arctic disputes that do not directly involve the United States will be considered because of their potential to draw in the United States through its NATO ties.

According to the Correlates of War database,⁶ maritime disputes over natural resources occur frequently in all parts of the world, though escalation to the level of war has not been observed and is assessed to be highly unlikely in the future, in any region. Cases involving Russia are of primary concern, of course, especially when considering the levels of conflict to which the Russians have resorted in maritime disputes in the northern Sea of Japan. Due to Russia's economic dependence on hydrocarbon resources, as indicated by the large percentage of its gross domestic product (GDP) derived from oil

⁵ A related factor is the Russian-Japanese disagreement regarding the sovereignty of the Kuril Islands in the same vicinity.

⁶ Faten Ghosn, Glenn Palmer, and Stuart Bremer, "MID3 Data Set, 1993–2001: Dispute Narratives, Version 3.0," March 25, 2004, http://www.correlatesofwar.org/COW2%20Data/MIDs/MID_v3.0.narratives.pdf.

and gas sales, the Russians place great strategic and national security value on resources discovered in the Arctic and will therefore be inclined to defend their claims militarily. To that end, the relative sizes and capabilities of the fleets of the Arctic nations are also assessed as potential factors in any confrontation in the region.

D. LITERATURE REVIEW

A review of the literature addressing the importance of the Arctic and areas of contention among the Arctic rim nations reveals a significant point of consensus: the likelihood of war erupting in the region over resources is virtually nil. Beyond that point of agreement, experts differ with respect to the effectiveness of institutional mediation and economic interdependence as factors of mitigation against conflict. Analysts arguing for the likelihood of cooperation hold that existing international agreements and fora provide adequate and sufficient mechanisms for conflict resolution. Meanwhile, other scholars maintain that, despite the utility of these institutions and mechanisms, nations are nevertheless “hedging” against a failure of diplomacy and increasing their military and law enforcement presence in the region in order to defend their claims and national interests. In every case, however, Russia is recognized as a “wild card” that tends to behave unpredictably and irrationally in achieving its own objectives.

Katarzyna Zyśk, for example, makes the point that Russia’s “divergent signals, sometimes confusing and contradictory, may in themselves [be elements] of a strategy”⁷ designed to place the onus of escalation on its opponents, and justifying the need to defend its own interests militarily in the face of foreign aggression.

So far, Russian military ambitions have been more rhetoric than reality...Nonetheless, steps towards a radical transformation of the defense sector have been taken, and, albeit slowly...in the future, strengthened and more accessible military capabilities may contribute to create situations where it will be easier to make use of them.⁸

⁷ Katarzyna Zyśk, “Russia and the High North: Security and Defense Perspectives,” in *Security Perspectives in the High North: Geostrategic Thaw or Freeze?* NDC Forum Paper 7, ed. Sven G. Holtsmark and Brooke A. Smith-Windsor (Rome: NATO Defense College, 2009), 106.

⁸ Katarzyna Zyśk, “Russia and the High North,” 123.

Echoing this, and other points made by Zyśk, Pavel K. Baev notes, “To a significant degree, Moscow appears also to be motivated by unquantifiable but irrationally powerful considerations related to international prestige.”⁹

On the other hand, advocates of institutionalism, such as Packard C. Trent, argue that, while current territorial conflicts involving all of the Arctic nations exist, these disputes are either currently being resolved through existing diplomatic means (most notably the institutions established through the United Nations Convention on the Law of the Sea (UNCLOS)), or are “not important enough for either nation to go to conflict over.”¹⁰ Advocates of cooperation are generally unanimous in their assertion that the UNCLOS remains the most effective means of conflict arbitration between the Arctic nations. As stated in the U.S. “Arctic Regional Policy,” “it give[s participants] a seat at the table when the rights that are vital to [their] interests are debated and negotiated.”¹¹ The UNCLOS allows participants to submit claims based on original scientific data for adjudication, and final decisions provide international legitimacy to these claims, thereby lowering (if not eliminating) the justification for armed clashes over the issue in the future. In summary, Trent notes that Arctic nations are actively engaged in diplomatic communication with each other, abiding by international law, and developing “strategies that confirm their commitment to cooperation, which reduce the possibility of conflict.”¹²

Unfortunately, Trent misinterprets the purpose and powers of the UNCLOS when he cites Part VI, Article 76(8) and states that “the recommendation given by the CLCS [Commission on the Limits of the Continental Shelf] ‘shall be final and binding.’”¹³ While it is true that the ruling on the claim is final and binding, it is only with respect to the legitimacy of the claim, not the final disposition of any disputes. In other words, it

⁹ Pavel K. Baev, “From West to South to North: Russia Engages and Challenges Its Neighbors,” *International Journal* 63, 2 (Spring 2008): 303, <http://www.jstor.org/stable/40204363>.

¹⁰ Packard C. Trent, “An Evaluation of the Arctic – Will It Become an Area of Cooperation or Conflict?” (Master’s thesis, Naval Postgraduate School, March 2011), 88.

¹¹ George W. Bush, “National Security Presidential Directive/NSPD 66 and Homeland Security Presidential Directive/HSPD 25,” January 9, 2009, <http://www.fas.org/irp/offdocs/nspd/nspd-66.htm>.

¹² Trent, “An Evaluation of the Arctic,” 91.

¹³ *Ibid.*, 23.

establishes an internationally recognized delineation of rights to claims, but does not provide for a final delimitation of territorial boundaries between disputants. Such issues must be resolved as a separate diplomatic matter between them or through arbitration.¹⁴ The UNCLOS, therefore, is not a panacea, only a partial solution.

At the same time, Chad Pate maintains in his graduate thesis that economic solutions could increase cooperation and limit the possibility of conflict. Pate proposes that increased Foreign Direct Investment (FDI) between nations increases “pacific” behavior—i.e., peaceful cooperation—between the recipient and the investor in an effort to maximize profit through their anticipated partnership, and leaves the door open for other mutually beneficial partnerships in the future.¹⁵ While theoretically plausible, in reality, especially with respect to Russia, such outcomes have historically failed to obtain in certain cases. The reasons why are discussed in Chapter III.

While Trent and Pate argue that cooperation among Arctic nations is possible, they both acknowledge that Russia’s current policies and actions inhibit other actors—governments and multinational corporations—from fully trusting that diplomatic and economic cooperation will suffice. Russia’s future prosperity is intrinsically tied to its hydrocarbon resources, including the vast reserves estimated to be located in the Arctic. From a Russian perspective, the very survival of the state depends on controlling as much of the natural resources in the region as possible.¹⁶ The result has been a ramping up of each nation’s military presence in the Arctic—ostensibly to better fulfill their constabulary roles in increasingly accessible territorial waters. Realistically, however, the NATO powers are acting to balance against Russia’s dominant military presence in the region.¹⁷ Even Roger Howard, who holds that natural resources are not the only reason

¹⁴ See especially UNCLOS, Annex II *Commission on the Limits of the Continental Shelf*, Article 9: The actions [read decisions] of the Commission shall not prejudice matters relating to delimitation of boundaries between States with opposite or adjacent coasts. See also UNCLOS Part VI, Article 83 *Delimitation of the continental shelf between States with opposite or adjacent coasts*, and Part XV *Settlement of Disputes*.

¹⁵ Chad P. Pate, “Easing the Arctic Tension: An Economic Solution” (Master’s thesis, Naval Postgraduate School, December 2010), 68.

¹⁶ Pate, “Easing the Arctic Tension,” 37–52.

¹⁷ Rob Huebert, “The Newly Emerging Arctic Security Environment,” *Canadian Defence & Foreign Affairs Institute*, March 2010.

for an arms race in the Arctic, agrees that such a build-up is nevertheless taking place in anticipation of increasing vulnerability to attack from this “fourth front.”¹⁸

Indeed, the *corpus major* of literature on interaction between Arctic governments tends to support the notion that, while a peaceful settlement to regional disputes is always desired, these same governments are simultaneously preparing to defend their claims militarily if necessary. Ariel Cohen, Senior Research Fellow for Russian and Eurasian Studies at the Heritage Foundation, advocates “opposing Russia’s territorial claims in the Arctic, but...without joining [the] LOST [Law of the Sea Treaty].”¹⁹ He is joined by Scott Borgerson,²⁰ Fellow for Ocean Governance at the Council on Foreign Relations, and by the National Academies²¹ in urging Congress to increase funding to provide for a more robust U.S. military and law enforcement presence in the Arctic.

Executive-branch policy-makers concur, as previously noted,²² and are pushing for an expanded role for the U.S. Navy and Coast Guard in the Arctic. Under the Obama administration, the Chief of Naval Operations issued the *U.S. Navy Arctic Roadmap* in October 2010 as part of the Navy’s Task Force Climate Change initiative to study the effects of global warming on the policy, strategy, force structure, and investments of the service in the region.²³ Key objectives of the *Roadmap* include assessing current readiness and capabilities for Arctic operations, increasing operational experience through high-latitude exercises, promoting cooperative relationships with other federal agencies and Arctic nation militaries, and improving environmental data collection and prediction capabilities.

¹⁸ Roger Howard, “Russia’s New Front Line,” *Survival* 52, 2 (2010): 141–156, doi: 10.1080/00396331003764678.

¹⁹ Ariel Cohen, “From Russian Competition to Natural Resources Access: Recasting U.S. Arctic Policy,” *Background*, No. 2421 (June 15, 2010): 12. LOST is an alternate acronym for the UNCLOS.

²⁰ Scott G. Borgerson, Statement before the Committee on Foreign Affairs, House of Representatives, Washington, D.C., March 25, 2009, 3.

²¹ National Research Council, “Summary for Congress,” *Polar Icebreakers in a Changing World: An Assessment of U.S. Needs* (Washington, DC: The National Academies Press, 2007), 4.

²² Bush, “National Security Presidential Directive/NSPD 66 and Homeland Security Presidential Directive/HSPD 25.”

²³ Oceanographer of the Navy, *U.S. Navy Arctic Roadmap* (Washington, DC: Department of the Navy, 2010), http://www.navy.mil/navydata/documents/USN_artic_roadmap.pdf.

Recent press releases and media reports have little to say regarding cooperative measures but mostly describe individual countries' increasing capabilities to defend their sovereign territory.²⁴ Hardline rhetoric, combined with provocative actions, has also increased tensions over a possible resource war.²⁵ Whereas the "Freedom of the Seas" in the Arctic was once a given,²⁶ only the United States has maintained such a position, while Russia and Canada in particular have made it clear that major waterways such as the "Northern Passage"²⁷ and the "Northwest Passage"²⁸ are their respective territorial waters.

Perhaps Rob Huebert, Fellow of the Canadian Defence and Foreign Affairs Institute, summed it up best:

Here is the real problem: because each of the Arctic states is in the process of rearming "just in case," they are all contributing to the growing strategic value of the region. As this value grows, each state will attach a greater value to their own national interests in the region. In this way, an arms race may be beginning. And once the weapons systems are in place, states can behave in strange ways.²⁹

It is important to note that Russia's military leadership continues to view the United States (and its NATO allies) as a significant threat to its national security, and that the

²⁴ Mia Bennett, "Russia, Like Other Arctic States, Solidifies Northern Military Presence," *Foreign Policy Association*, July 4, 2011, <http://foreignpolicyblogs.com/2011/07/04/russia-arctic-states-solidifying-northern-military-presence/>.

²⁵ Associated Press, "Putin says Russia will expand presence in Arctic," June 30, 2011, <http://www.signonsandiego.com/news/2011/jun/30/putin-says-russia-will-expand-presence-in-arctic/>. And also Nataliya Vasilyeva, "Russia, Canada in Rivalry over Arctic Resources," *Associated Press*, September 16, 2010, <http://www.signonsandiego.com/news/2010/sep/16/russia-canada-in-rivalry-over-arctic-resources/>. And also Associated Press, "Russia to deploy 2 Army Brigades in Arctic," July 1, 2011, <http://www.signonsandiego.com/news/2011/jul/01/russia-to-deploy-2-army-brigades-in-arctic/>.

²⁶ Donat Pharand, "Freedom of the Seas in the Arctic Ocean," *The University of Toronto Law Journal* 19, no. 2 (Spring, 1969): 210–233.

²⁷ Cohen, "From Russian Competition to Natural Resources Access," 9. The Russians more consistently refer to this passage as the "Northern Passage" or "Northern Sea Route." For purposes of symmetry when discussing it vis-à-vis the Canadian "Northwest Passage," the alternate term "Northeast Passage" is also employed in the literature on the Arctic to refer to this same passage over which Russia asserts oversight.

²⁸ Oran R. Young, "Canada and the United States in the Arctic: Testing the 'Special Relationship'" *Northern Perspectives* 15, 2 (May-June 1987), <http://www.carc.org/pubs/v15no2/2.htm>. And also "Canadians 'Support More Troops to Defend Arctic Claims'" BBC News, 25 January, 2011, <http://www.bbc.co.uk/news/world-us-canada-12272312>.

²⁹ Huebert, "The Newly Emerging Arctic Security Environment," 22–23.

Russian military maintains “a clear institutional interest in portraying NATO’s expansion” as aggressive and menacing.³⁰

While most authors offer suggestions on ways to mitigate threats and reduce tensions, the underlying assumption is that if such steps are not taken, or if disputes remain unresolved, conflict is possible. A significant gap in the literature, then, is that, despite various acknowledgements that an arms competition may be beginning, there has been no thorough analysis conducted regarding its potential consequences, and what other factors could spark a militarized confrontation in the Arctic. Navies can be—and have been—employed in several degrees of conflict short of war, after all, from shows of force to searches and seizures. Efforts by countries to hedge against a failure of diplomacy—intentional or not—set the stage for self-fulfilling prophecies.

E. METHODOLOGY AND SOURCES

This thesis analyzes an array of independent factors likely to contribute to the escalation of a dispute from the diplomatic realm into the military one. In determining the likelihood of maritime conflict in the Arctic, six independent variables will be analyzed:

(1) *the degree of economic dependence on hydrocarbon resources in the Arctic and elsewhere*, assessed as a percentage of GDP (or alternatively, national state budget) derived from income from such resources;

(2) *the value of (potentially) contested claims* (reflecting the need to defend such claims), assessed as the value in U.S. dollars of resource deposits in disputed areas (or areas of potential dispute) based on current market prices, and also assessed in terms of the political assertions advanced in an effort to secure recognition of claims;

(3) *the ability to defend claims over disputed areas*, assessed as a function of current or projected maritime capabilities (including platforms designed to operate in Arctic conditions), and taking into account the geographic location and area of respective Arctic claims;

³⁰ William D. Jackson, “Encircled Again: Russia’s Military Assesses Threats in a Post-Soviet World,” *Political Science Quarterly* 117, no. 3 (Autumn 2002): 379.

(4) *the historical propensity for militarized conflict*, assessed by the frequency of past (maritime) conflicts over natural resources;

(5) *the role of international institutions*, assessed in terms of success in mitigating maritime conflicts (i.e., preventing escalation or promoting a peaceful resolution of disputes);

(6) *the economic interdependence*, assessed as a percentage of GDP of foreign direct investment, with due attention to the obstacles to increased interdependence.

The historical propensity for militarized conflict is a primary factor in assessing the likelihood of future conflict. Disputes involving Russia are of primary concern, while those involving other nations will also be considered as a reflection of the value placed on such commodities and issues and the country's willingness to defend them militarily.

In the conclusion of this thesis, these variables are assessed based on the arguments presented herein and assigned a value reflecting the significance of that factor in increasing the likelihood of conflict on an ordinal scale of HIGH (2), MEDIUM (1), and LOW (0), except in the cases of the role of international institutions and the degree of economic interdependence, where the values assigned are reversed (i.e., LOW = 2, MEDIUM = 1, and HIGH = 0). Russia and the United States are scored separately. However, where the effects of alliances or other external security interests are concerned, such values are marked with an asterisk (*) indicating that this score is higher than it would be if the impact of a particular variable on a country were considered in isolation. The higher the cumulative value of all the variables, the higher the likelihood that conflict in the Arctic will occur. The maximum score possible, therefore, is 24, indicating that the potential for conflict in the Arctic is extremely likely. The minimum score possible is 0, indicating that there is no possibility of conflict in the Arctic. Table 1 provides a breakdown of the score-to-potential relationship.

| SCORE | LIKELIHOOD OF CONFLICT |
|--------------|-------------------------------|
| 21–24 | Extremely Likely |
| 17–20 | Likely |
| 13–16 | Probable |
| 9–12 | Possible |
| 5–8 | Unlikely |
| 0–4 | Extremely Unlikely |

Table 1. Aerandir Conflict Assessment Matrix. The likelihood of maritime conflict in the arctic, assessed as a cumulative score of six factors. Values are assigned (see Table 2, Aerandir Conflict Assessment Index) and likelihood is assessed in the conclusion.

Ultimately, this is an analytically subjective, vice statistically objective, measurement—a forecast based on informed judgments about historical trends. The goal of this thesis, therefore, is to underpin this subjective judgment with objective facts and logical arguments in support of such an analysis.

Primary sources analyzed in this thesis consist of treaty and governmental policy documents, including the United Nations Convention on the Law of the Sea, bilateral accords of territorial demarcation, the “Arctic strategies” of the respective Arctic powers and related political statements, and charters and declarations of international organizations such as NATO and the Arctic Council. Additionally, empirical support for case studies is drawn from the Correlates of War database on Militarized Interstate Disputes, assessments and order-of-battle tabulations by Information Handling Services (IHS) Jane’s Information Group, data compiled by the International Monetary Fund and the World Bank, and CIA Factbook economic data reports.

Secondary sources discussing the economic, political, and military impact of the melting Arctic ice cap, including articles by Arctic experts and scholars, think tank reports, academic theses, and assessments by the Congressional Research Service of the Library of Congress, are analyzed to provide background, context, and insight into the objectives, intentions, and actions of the Arctic states. Finally, media reports and commentaries supplement these primary and secondary sources by filling in information gaps and providing further context on public perceptions of Arctic matters which can influence policy-makers’ decision calculi.

F. THESIS OVERVIEW

In order to assess the likelihood of conflict in the Arctic, it is first necessary to pinpoint the underlying geopolitical factors that are contributing to its continuing militarization.

Chapter II seeks to identify the threats to U.S., allied, and Russian interests in this region. In this respect, geography, geology, politics, and economics are all contributing to an Arctic arms race for access to resources (discovered and potential), routes, and recognition. Here, capability, opportunity, and intent come together to delineate the contours of the threat to Arctic nations.

Chapter III investigates factors that may help mitigate against militarized interstate disputes in the region but also exposes myths in the belief that such factors are panaceas for conflict. These factors may, in fact, only serve to delay, but not prevent, eventual maritime confrontations. Expanding on this line of argument, this chapter also explores how, in the fog before war, an otherwise banal event could quickly escalate into a political power play between navies in the presence of historical mistrust, a perception of vulnerability, and nationalist sentiment.

Chapter IV addresses the risks and stakes of this Arctic arms race, arguing that, in the final analysis, military might will determine who can, ultimately, not only claim, but also secure, access, and maintain sovereignty over the territory and treasure of the Arctic. Finally, this chapter also analyzes the threat equation and concludes with a subjective assessment of the likelihood of maritime conflict in the Arctic and policy recommendations for meeting the challenges of a militarized northern front.

THIS PAGE INTENTIONALLY LEFT BLANK

II. IDENTIFYING THE THREAT

“Notwithstanding the public statements of peace and co-operation in the Arctic issued by the Arctic states, the strategic value of the region is growing. As this value grows, each state will attach a greater value to their own national interests in the region. The Arctic states may be talking co-operation, but they are preparing for conflict.”

—Rob Huebert,
Professor of Political Science,
University of Calgary³¹

When key decision-makers seek to understand and interpret world events and the actions of their neighbors and competitors, perception is everything. Whether one is more liberally inclined to take someone at his word or is more of a realist, for whom actions speak louder than words, any inconsistency between the two—words and actions—raises suspicion of another’s intent or objectives. Such suspicion often clouds the decision-making calculus by forcing policy-makers to rely on biased perceptions, previous experiences, personal ideology, and a whole host of other subjective means to compensate for what their objective reasoning and sensors cannot resolve. If the conclusions of their decision-making process lead to perception of a threat, then the potential for conflict increases. Depending on the magnitude of ambiguous input into this process (for present purposes, the disparity between words and actions), the potential for a miscalculation of the threat also increases, and presents the opportunity for a conflict of interests to escalate into a conflict of arms.

In this chapter, factors contributing to an increased threat perception in Arctic affairs are analyzed and assessed. These factors include the increased opportunity for conflict, the increased capability to engage in conflict, and the increasing perception of intent to engage in conflict if national interests are flouted. Such national interests, as concerns the Arctic states, include Russia’s increasing reliance on hydrocarbon resources as a source of political and economic strength and stability, disputed areas of potential

³¹ Rob Huebert, “The Newly Emerging Arctic Security Environment,” Canadian Defence & Foreign Affairs Institute (March 2010), <http://www.cdfai.org/PDF/The%20Newly%20Emerging%20Arctic%20Security%20Environment.pdf>, iv.

hydrocarbon resources in this region, and associated issues of prestige and sovereignty as manifested in political rhetoric and behavior. According to a 2008 National Intelligence Estimate, “Climate change is unlikely to trigger interstate war, but it could lead to increasingly heated interstate recriminations and possibly to low-level armed conflicts”³² as “perceptions of energy scarcity...drive countries to take actions to assure their future access to energy supplies. In the worst case this could lead to interstate conflicts if government leaders deem assured access to energy resources to be essential to maintaining domestic stability and the survival of the regime.”³³

A. WHY NOW?

In 1984, Simon Ollivant published a short, comprehensive study on the rising geostrategic importance of the High North entitled “Arctic Challenge to NATO.” At a time when military technological innovation was at its Cold War peak, Ollivant examined the potential for armed conflict in and over what was previously a region at the margins of both the earth and political awareness: inhospitable and barren, a no-man’s land of seemingly inconsequential value to great superpowers and lesser bandwagoners alike. Analyzing the effects of the latest developments in military technology, force dispositions, and resource and sovereignty claims on the military stability of the region, Ollivant concluded that the greatest dangers to NATO unity were an unbalanced American hegemony in the region and increased political conflict among allied members over contested economic interests in the region.³⁴

Since the collapse of the Soviet Union, of course, a great deal has changed in the world of international relations. The frozen tensions and balances of the bi-polar Cold War have melted into a dynamic maelstrom of multi-polar politics. While the reasons for interest in the Arctic have changed, *ceteris paribus*, the dangers to NATO remain

³² National Intelligence Council, “Growing Potential for Conflict,” *Global Trends 2025: A Transformed World* (Washington, D.C.: U.S. Government Printing Office, 2008), <http://www.aicpa.org/research/cpahorizons2025/globalforces/downloadabledocuments/globaltrends.pdf>, 66.

³³ Ibid., 63.

³⁴ Simon Ollivant, “Arctic Challenge to NATO,” in *Conflict Studies* 172 (London: The Institute for the Study of Conflict, 1984), 20–21.

practically the same as those identified during the Cold War by Ollivant, if not more salient. Just as climate change is breaking up the ice in the North, regional territorial disputes, formerly manageable owing to the existential threat of nuclear Armageddon, now have the potential to divide and weaken the integrity of the alliance. Meanwhile, whereas American hegemonic policy in allied affairs can now be considered a sub-set of the aforementioned danger, it is now Russian hegemony in the Arctic that may serve as a truer test of NATO cohesion and military capability, depending on Moscow's choices.

At the same time, the substance of the threat has indeed changed: while the potential for global thermonuclear war has continued to linger on in international affairs and military readiness, tensions associated with military maneuvers in the Arctic have become more conventional in nature. In the intervening twenty years, other interests have also emerged which have made this region, once again, a potential battleground among old rivals. In the twenty-first century, a force even more powerful than the nuclear weapon—nature—has become the catalyst of international competition, opening the Arctic up to exploitation in previously impractical, if not impossible, ways.

B. OPPORTUNITY

Whatever the causes of the shrinking Arctic ice cap, the fact remains that it is occurring—and not at a glacial pace. Since measurements were first routinely recorded in 1979 (the satellite record), the long-term trend in the extent of the northern cryosphere has been an absolute decline in total September ice extent of approximately 13 percent per decade, despite periodic short-term increases in “new ice,” which melts just as easily as it forms (see Figure 1).³⁵ On the upside, such ice is easier to break and navigate for the purposes of shipping in the region, but in the long-term, the global environmental impacts are just beginning to be understood. In the fast-paced, interconnected era of the twenty-first century, governments are becoming increasingly vigorous in their policies and actions, with little patience for long-term solutions or studies. Arctic governments

³⁵ Katherine Leitzell, “Is Arctic Sea Ice Back to Normal?” *Arctic Ice News and Analysis*, National Snow and Ice Data Center, May 29, 2012, <http://nsidc.org/icelights/2012/05/29/is-arctic-sea-ice-back-to-normal/>. Also, National Snow and Ice Data Center, “Arctic Ice 101,” <http://nsidc.org/icelights/arctic-sea-ice/>.

and economic entities alike are scrambling to take advantage of this phenomenon to exploit natural resources and maritime routes that have been locked away for eons.

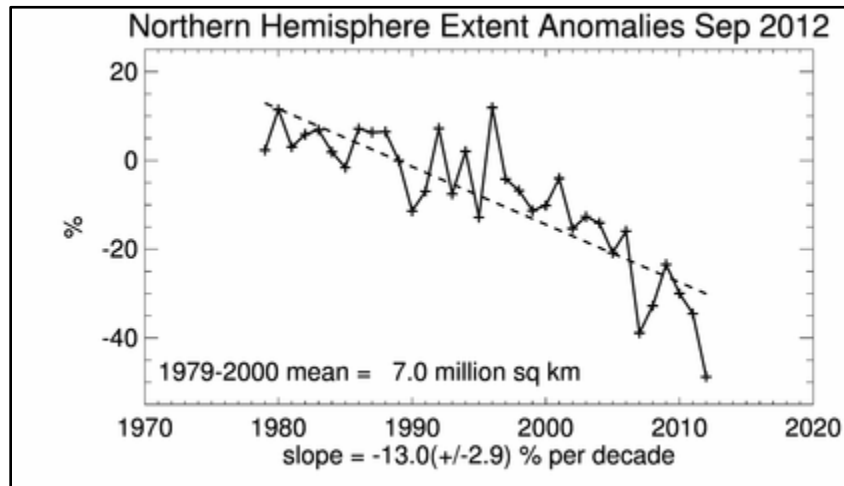


Figure 1. Decline in Sea Ice Extent, September 1979 to 2012³⁶

While the Arctic ice has been receding gradually, it has only been in the last decade that the imminent possibility of an ice-free season has attracted the serious attention of policy-makers and economic interests. In 2007, the summer ice minimum receded to such an extent that by September, for the first time in the satellite record, the Northwest Passage was completely navigable for regular ocean-going vessels.³⁷ It is currently estimated that the Arctic Ocean could experience an ice-free summer season as soon as 2030³⁸ or even 2015, according to interpretations of other models;³⁹ however, the changing dynamics of year-to-year climatology in the region make a more certain and precise estimate untenable. Regardless, the certainty that the Northwest Passage will be open soon—that is to say, within the next 10 to 20 years—presents a tantalizing

³⁶ National Snow and Ice Data Center, "Sea Ice Trends in Extent," http://sidads.colorado.edu/DATASETS/NOAA/G02135/Sep/N_09_plot.png.

³⁷ National Snow and Ice Data Center, "Arctic Sea Ice Shatters All Previous Record Lows," http://nsidc.org/news/press/2007_seaiceminimum/20071001_pressrelease.html.

³⁸ Ibid.

³⁹ Frédéric Lasserre, "High North Shipping: Myths and Realities," in *Security Perspectives in the High North: Geostrategic Thaw or Freeze?* NDC Forum Paper 7, Ed. Sven G. Holtsmark and Brooke A. Smith-Windsor (Rome: NATO Defense College, 2009), 180.

opportunity for those who are able to take advantage of it: specifically, hydrocarbon and mineral extraction enterprises and commercial shipping ventures.

As mentioned earlier, the weaker new and first-year ice is readily broken by icebreakers, making navigation and exploration easier than ever. As the ice continues to recede from the coastline and becomes thinner, off-shore drilling platforms will become a more feasible method of extraction in the region, tapping into potential reserves estimated to account for 22 percent of the world's "undiscovered, technically recoverable" hydrocarbon energy supply.⁴⁰ This is also aided by the ability of transport and supply vessels to more easily operate, at times even unassisted, between northern ports and these off-shore platforms. Ultimately, though, as noted by Timo Koivurova and Kamrul Hossain of the Arctic Centre, it has been the increasing demand for, and reliably high-price of, oil and gas over the past decade that has finally made such exploration and extraction economically viable.⁴¹

Another economic benefit of the receding northern cryosphere is the seasonal opening of the Northwest and Northeast Passages for long-haul commercial shipping. When ice-free navigation is possible, shipping distances between Europe and Asia could decrease by 3,000 to 10,000 km compared to current routes via the Panama and Suez canals.⁴² According to an estimate by the Heritage Foundation, "using the Northeast Passage along the Russian coast reduces a trip from Hamburg to Shanghai by almost 4,000 miles, cuts a week off delivery times, and saves approximately \$650,000 in fuel costs per ship."⁴³ Not only do these new routes significantly decrease delivery times, they also stand save companies millions (if not billions) of dollars annually in associated logistics costs.

⁴⁰ U.S. Geological Survey, "90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic," July 23, 2008, <http://www.usgs.gov/newsroom/article.asp?ID=1980>.

⁴¹ Timo Koivurova and Kamrul Hossain, *Offshore Hydrocarbon: Current Policy Context in the Marine Arctic*, Arctic Transform Program, September 4, 2008, <http://arctic-transform.org/download/OffHydBP.pdf>, 6.

⁴² Lassere, "High North Shipping: Myths and Realities," 192–194.

⁴³ Luke Coffey, "NATO in the Arctic: Challenges and Opportunities," *Issue Brief* No. 3646, June 22, 2012, The Heritage Foundation, <http://report.heritage.org/ib3646>, 1.

There are, however, several important caveats to note when considering economic activity in the High North. Firstly, in addition to the hazards presented by disintegrating ice floes, due to the high degree of seasonal variability in ice coverage from year-to-year neither the temporal nor the spatial availability of a reliant, ice-free corridor can be predicted, even with current technology and computing models.⁴⁴ This unpredictability is not conducive to the needs of routine shipping, even on a seasonal basis. Secondly, and for this reason, a distinction must be made between container and bulk shipping. As Frédéric Laserre points out, the former are bound to tight delivery schedules, with multiple intermediate deliveries being made en route to maximize the cost-effectiveness of their shipments.⁴⁵ Bulk shipments of agricultural goods and natural resources are less bound to such considerations and are therefore a likely sector that will take advantage of an opening Arctic. Thirdly, the distance savings applies mostly to shipments made to and from more northern ports: the farther south either port is, the less likely that an Arctic route will offer an economic advantage.⁴⁶ Fourth, the extreme Arctic climate still presents a harsh operating environment for workers who would be exposed to the elements. Constructing, operating, and maintaining extraction platforms in rough seas and high winds is difficult enough, but the extreme cold temperatures in the Arctic pose hazards to man and machine alike. In the final analysis, however, the consensus is that the ice caps will continue to recede annually in absolute terms and ice-free summers will eventually obtain. Political leaders and corporate executives should begin planning to exploit this eventuality now, lest they be left scrambling at the gates when they do open for business, however seasonally.

Taken on a country-by-country basis, the economic opportunities provided by the receding ice caps provide powerful motivators for action in securing and exploiting Arctic resources as soon as possible. Unfortunately, the geopolitical nature of the Arctic

⁴⁴ Lassere, "High North Shipping: Myths and Realities," 194.

⁴⁵ Ibid., 196.

⁴⁶ Ibid., 194.

does not permit such an isolated context when framing policy objectives. In reality, the melting ice caps also expose anxiety and fears over economic encroachment – or overreach.

1. Staking Claims

According to the United Nations Convention on the Law of the Seas (UNCLOS),⁴⁷ countries are entitled to exclusive economic zones (EEZ) out to 200 nautical miles (nm) from their territorial baselines. Any claims beyond this limit are termed “excessive” but may be recognized after a country submits proof that such claims are justified according to the provisions established in the UNCLOS and adjudicated by committee. Part VI of the UNCLOS establishes the criteria under which Parties (ratified signatories) may make “excessive” claims to exclusively exploit the resources of the seabed and subsoil (but not the water column or airspace above it) beyond the 200 nm EEZ. The claims may not exceed an additional 150 nm from the EEZ or 100 nm beyond the point where the depth of the water is 2,500 meters, whichever is greater. In order to validate these claims, extensive research must be conducted to map the hydrography, probe the geology, and survey the geodesy of the Arctic. Evidence to support one’s claim must then be submitted to a Commission established under Annex II of the UNCLOS for adjudication, and all decisions reached are final and binding on all Parties in the dispute. Finally, it is important to note that time is of the essence: a nation has only ten years from the day it ratifies the UNCLOS to submit claims in excess of its respective EEZ for adjudication. In certain areas of the Arctic, the race is on to meet this deadline.

2. Disputed Areas

As of this writing, there are five outstanding territorial disputes among Arctic nations. Each has the potential to lead to some level of conflict if not resolved peacefully through existing mechanisms or otherwise binding agreements. Four of the five would

⁴⁷ As of this writing, the United States remains the only Arctic nation that is not a ratified signatory to this convention. While the United States has signed the treaty and adheres to most of its provisions as a matter of customary law, final and binding ratification remains the subject of controversy in the U.S. Senate. United Nations, “United Nations Convention on the Law of the Sea,” December 10, 1982, http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf.

involve the United States and Russia directly or indirectly. Put differently, there are several continuing points of contention between Russia and non-U.S. NATO allies that, if diplomacy failed, could bring the United States into a conflict. While the countries involved in these disputes are largely resolved to pursue diplomatic solutions, the process of negotiation and arbitration could take several years. In the meantime, concerns over prestige, sovereignty, and/or the long-term economic implications of an unfavorable finding provide ample motive for countries to establish *de facto* jurisdiction or simply squatter's rights over particular claims through military presence or economic development in these disputed areas.

a. The Lomonosov Ridge – Canada, Denmark, and Russia

Perhaps the most hotly contested area in the Arctic at present is the Lomonosov Ridge: an underwater mountain chain that extends across the Arctic Ocean for over 900 nm⁴⁸ from the New Siberian Islands off the north central coast of Russia to Ellesmere Island in the Canadian Archipelago (see Figure 2). The governments of Canada, Denmark, and Russia are all in a position to stake a claim to the area, provided they can present sufficient evidence to the Commission on the Limits of the Continental Shelf (CLCS) that the Lomonosov Ridge is, indeed, a geological extension of their respective continental shelves.

⁴⁸ Converted from kilometers. Cited measure is approximate and derived from specifications provided by GlobalSecurity.org, "Arctic Ocean," <http://www.globalsecurity.org/military/world/war/arctic.htm>.

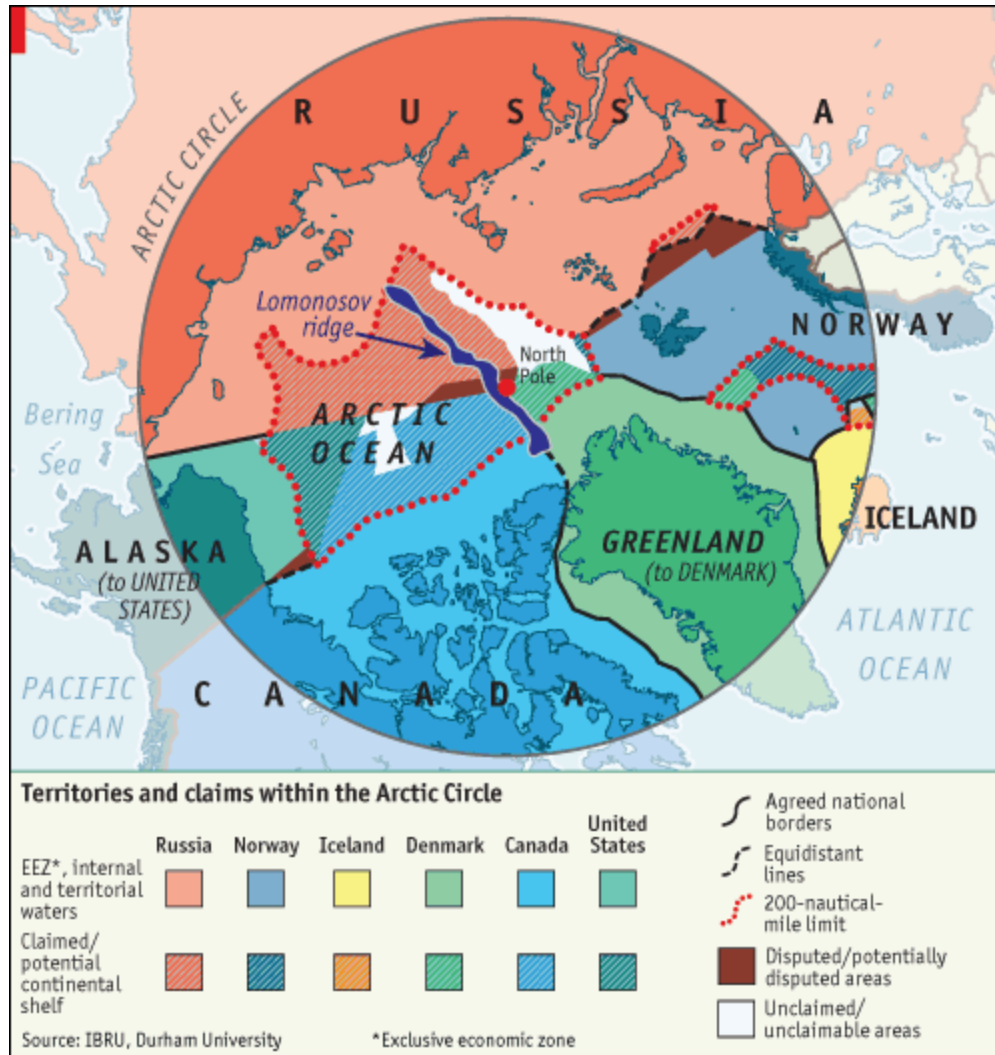


Figure 2. Territories and Claims within the Arctic Circle⁴⁹

In 2001, Russia became the first nation to submit a claim to the CLCS. Along with three other areas, the Russian delegation attempted to establish the outer limits of its continental shelf in excess of its 200 nm EEZ in the Arctic Ocean. Ultimately, the committee withheld approval of Russia's Arctic claims, asking the delegation to provide more substantive, original data to support them.⁵⁰ Thus from 2007

⁴⁹ Image credit: IBRU, Durham University, taken from *The Economist*, "The Scramble for the Seabed: Suddenly, a Wider World below the Waterline," May 14, 2009, <http://www.economist.com/node/13649265>.

⁵⁰ Ariel Cohen, "Russia in the Arctic: Challenges to U.S. Energy and Geopolitics in the High North," in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle: Strategic Studies Institute, 2011), 6.

to 2011, a Russian scientific expedition travelled to the ridge to collect soil samples to satisfy the commission's requirements. In July 2011, Russian Deputy Prime Minister Sergei Ivanov announced that his country intended to submit its findings to the CLCS later the following year.⁵¹

In total, Russia stands to obtain rights over approximately five billion tons of fuel equivalent, according to the Russian Minister of Natural Resources, Yury Trutnev.⁵² At a rate of approximately \$100 per barrel, this equates to a potential revenue of \$350 trillion over the life of such deposits. The United States Geological Survey estimates that the probability of finding at least one hydrocarbon field with recoverable resources of at least 50 million barrels of oil equivalent in the vicinity of the Lomonosov Ridge is less than 30 percent (see Figure 3) and estimates that there is likely only about 2.5 billion barrels of oil equivalent in that area (vice the approximately 35 billion barrels in the Russian estimate).⁵³

Nevertheless, according to Dmitry Medvedev, then the Russian President, the sale of Arctic resources alone already “accounts for around 20 percent of Russia’s gross domestic product and 22 percent of [its] national exports.”⁵⁴ As the oil and gas deposits of western Siberia shrink over the next fifteen years, Moscow will be forced to rely increasingly on the potential reserves in the Arctic to compensate for this loss and stabilize the dynamics of its intractable reliance on hydrocarbon resources to fund its

⁵¹ Thomas Grove, “Russia to Submit U.N. Arctic Claim Next Year,” *Reuters*, July 7, 2011, <http://www.reuters.com/article/2011/07/07/us-russia-arctic-claim-idUSTRE76528320110707>. As of this writing, Russia has not yet submitted its new findings.

⁵² RIA Novosti, “Lomonosov Ridge Could Bring Russia 5 Billion Tons of Extra Fuel,” October 4, 2007, http://www.energy-daily.com/reports/Lomonosov_Ridge_Could_Bring_Russia_5_Billion_Tons_Of_Extra_Fuel_999.html.

⁵³ Kenneth J. Bird, et al., “Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle,” U.S. Geological Survey Fact Sheet 2008–3049 (2008), <http://pubs.usgs.gov/fs/2008/3049/>, 4. Conversion of metric tons to barrels (1 MT = 7 barrels) is derived from the formula provided by Robert Fogt at http://www.onlineconversion.com/forum/forum_1058197476.htm and should be regarded as an approximate measure.

⁵⁴ Dmitry Medvedev, “Speech at Meeting of the Russian Security Council on Protecting Russia’s National Interests in the Arctic,” the Kremlin, September 17, 2008, http://archive.kremlin.ru/eng/text/speeches/2008/09/17/1945_type82912type82913_206564.shtml.

national security and government operations.⁵⁵ This dynamic serves as a significant driver of Moscow's motivation to press for as large a territorial claim in the Arctic as possible. This is further discussed in this chapter in the section on intent.

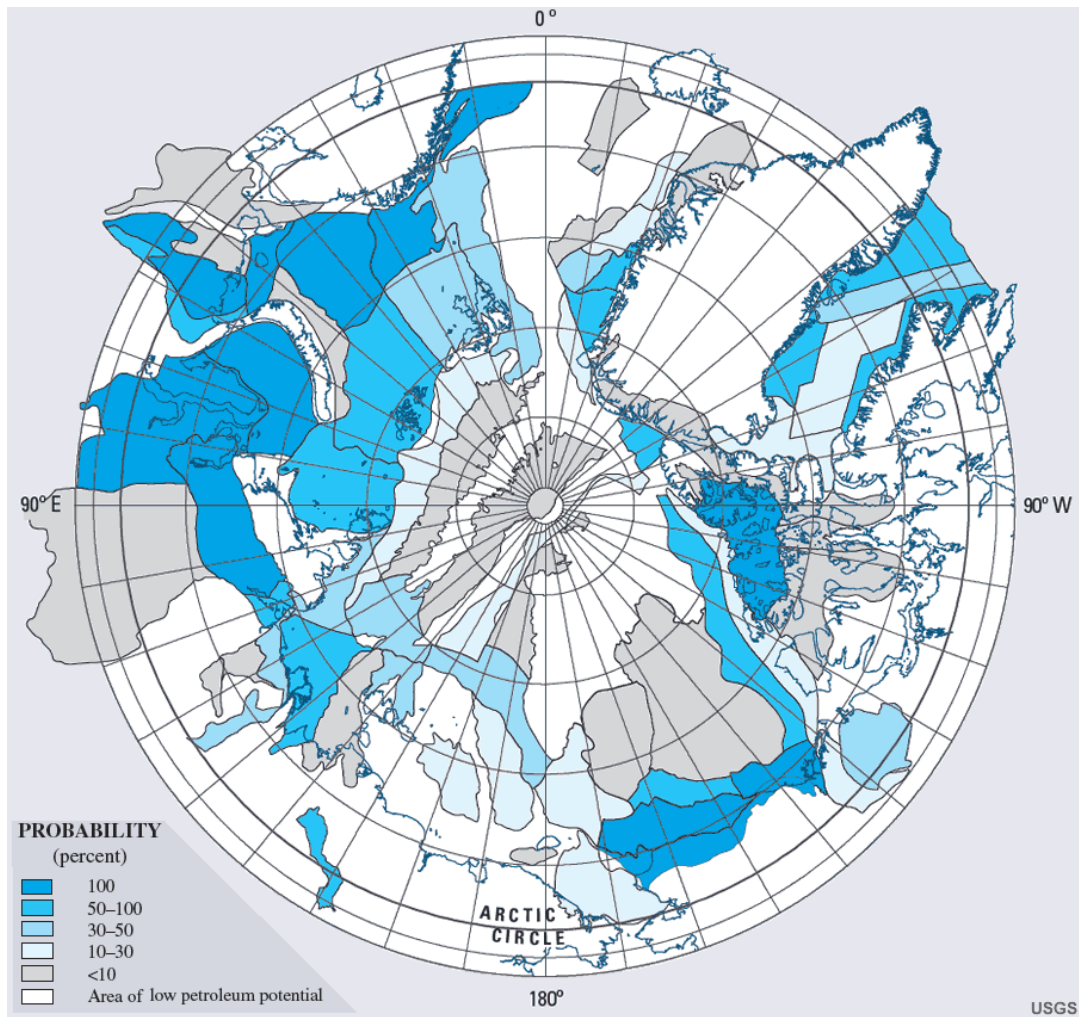


Figure 3. Assessment Units (AUs) in the Circum-Arctic Resource Appraisal (CARA). Color-coded by assessed probability of the presence of at least one undiscovered oil and/or gas field with recoverable resources greater than 50 million barrels of oil equivalent (MBOE). Probabilities are based on the entire area of the AU, including any parts south of the Arctic Circle.⁵⁶

⁵⁵ Ministry of Energy of the Russian Federation, “Energy Strategy of Russia for the Period up to 2030,” Decree No. 1715-r of the Government of the Russian Federation dated 13 November 2009, [http://www.energystrategy.ru/projects/docs/ES-2030_\(Eng\).pdf](http://www.energystrategy.ru/projects/docs/ES-2030_(Eng).pdf), 60.

⁵⁶ Image Credit: USGS, Bird, et al., “Circum-Arctic Resource Appraisal,” 2.

Canada and Denmark, meanwhile, embarked on a joint venture starting in 2011 to survey, map, and collect pertinent data to support their respective claims to the CLCS that the Lomonosov Ridge is rather an extension of the North American continental shelf. Canada has until November 2013 to submit its claims, while Denmark has until November 2014.⁵⁷

It is important to note that, while the CLCS can rule on the validity of submitted claims, it does not arbitrate among competing claims. Therefore, regardless of whether the Lomonosov Ridge is found to belong to everyone or no one, delimitation of boundaries in overlapping areas must be accomplished via a separate treaty or other agreement between the nations in dispute (UNCLOS, Part XV). The CLCS determination simply provides international recognition of, and validity to, claims when they are taken to the negotiation table. The ramifications of this procedural disconnect are discussed in a later section of this chapter on intent. For present purposes, it should be noted that the Lomonosov Ridge will likely be divided among the claimants. Who gets how much, however, will likely come down to squatter's rights. As Trent points out, until a final agreement is reached, "these countries would have to either cooperate and jointly extract the resources in the disputed areas or extract the resources with complete disregard to the other nations, which would create conflict between them."⁵⁸

It is evident that Russia views the Arctic scramble in broader terms than pure economics. At the same meeting in which Ivanov announced the Kremlin's intent to submit its findings to the CLCS, high-level defense officials pointed to threats from an expansionist NATO in the Arctic region and vowed to "counter potential threats to its energy and mineral interests in the region through the creation of two brigades of Arctic troops."⁵⁹ Thus, while Russia seeks to resolve this dispute peacefully as a reasonable

⁵⁷ Kathryn Isted, "Sovereignty in the Arctic: An Analysis of Territorial Disputes & Environmental Policy Considerations," *Journal of Transnational Law & Policy* 18 No. 2 (Spring 2009), (Tallahassee: Florida State University, 2009): 362. http://www.law.fsu.edu/journals/transnational/vol18_2/isted.pdf.

⁵⁸ Packard C. Trent, "An Evaluation of the Arctic – Will It Become an Area of Cooperation or Conflict?" (Master's thesis, Naval Postgraduate School, 2011), 36.

⁵⁹ Grove, "Russia to Submit U.N. Arctic Claim."

first step,⁶⁰ it is simultaneously signaling its intent to defend its claims militarily if the resolution is not acceptable to Russia's interests. If Russia were to challenge Canadian or Danish claims or presence militarily, the United States could become involved as well as both an ally and an Arctic power.

b. The Bering Strait – Russia and the United States

The boundary between Russia and the United States in the Bering Strait was negotiated between the two countries as the Soviet Union was collapsing (see Figure 4). As previously noted in Chapter I, while the treaty was subsequently ratified by the U.S. Senate, the Russian Duma has yet to reciprocate—and thereby make the boundary official. The primary concern on the Russian part is a perception that the United States got a better deal than Russia. According to Vlad Kaczynski, “Although both countries ceded territory from their previous claims, the U.S. still controlled a far greater amount of area in the Bering Sea than if the new agreement been based on the equidistant line principle normally used in international boundary disputes.”⁶¹ As a result, the United States secured control over more potential natural resources in the area than Russia, including oil, gas, and fisheries, not to mention more room to maneuver for its submarines.⁶²

Presently, both countries continue to politically abide by the terms of the agreement, but economic interests continue to violate it, especially Russian fishing trawlers entering U.S. waters, leading to several incidents of low-level conflict. For example, on August 15, 1997, the Russian fishing trawler *Chernyayev* was caught poaching in U.S. waters by the U.S. Coast Guard. The ship was boarded, seized, and the crew arrested and taken to Kodiak island for trial. In December of that year, they were

⁶⁰ Luke Harding, “Vladimir Putin Calls for Arctic Claims to Be Resolved under UN Law,” *The Guardian*, September 23, 2010, <http://www.guardian.co.uk/world/2010/sep/23/putin-arctic-claims-international-law>.

⁶¹ Vlad M. Kaczynski, “U.S.-Russian Bering Sea Marine Border Dispute: Conflict over Strategic Assets, Fisheries and Energy Resources,” in *Russian Analytical Digest* 20, May 1, 2007, <http://www.css.ethz.ch/publications/pdfs/RAD-20-2-5.pdf>, 3.

⁶² *Ibid.*, 4.

released after paying a heavy fine.⁶³ Again in August 1999, the U.S. Coast Guard boarded another Russian fishing trawler *Gissar* for poaching but the boarding party was forcibly removed when several other Russian fishing trawlers surrounded them.⁶⁴ Kaczynski notes that “the belligerence of Russian fishing vessels towards U.S. enforcement efforts continues to increase...The situation has become so enflamed that the U.S. is contemplating using naval gunfire, in the form of warning and disabling shots, against non-compliant vessels. Such a resort to violence may only further destabilize the situation.”⁶⁵ Unfortunately, until the two countries can come to an agreement, the potential for conflict will remain.

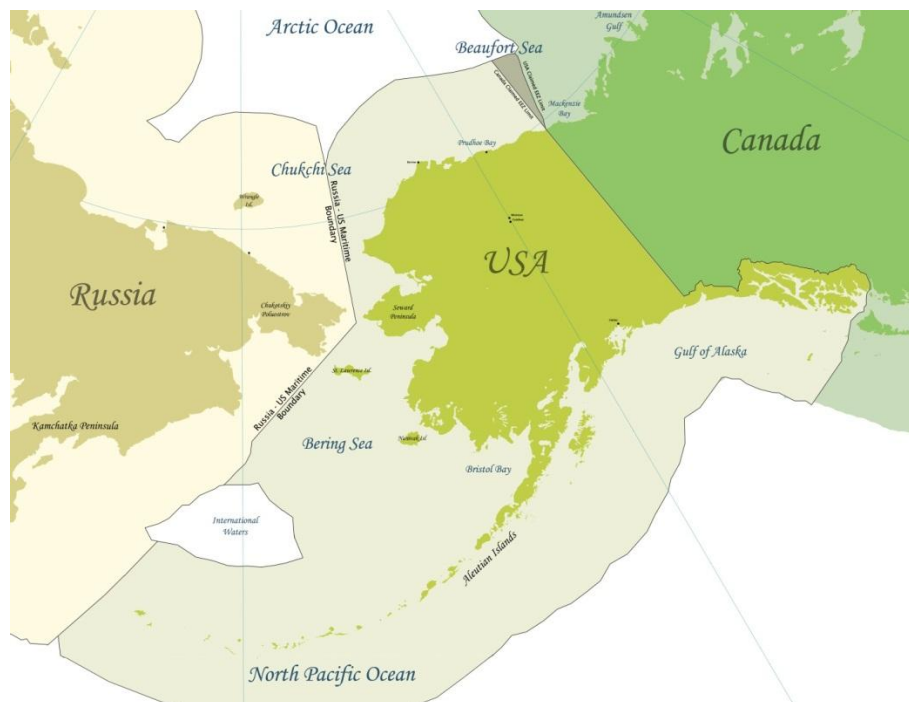


Figure 4. U.S.-Russian Maritime Boundary and Exclusive Economic Zones⁶⁶

⁶³ Northern Pacific, “Russia may Lose One Alaska More,” http://www.npacific.ru/np/magazin/1-98_e/np5002e.html.

⁶⁴ U.S. Coast Guard, “Daily Chronology of Coast Guard History,” http://www.uscg.mil/history/Chron/Chronology_Aug.asp.

⁶⁵ Kaczynski, “U.S.-Russian Bering Sea Marine Border Dispute,” 4–5.

⁶⁶ Image Credit: Arctic Economics, “United States – Russian Maritime Boundary and Exclusive Economic Zones,” January 11, 2012, <http://arcticecon.wordpress.com/>.

c. The Beaufort Sea – Canada and the United States

Farther North, two NATO and NORAD allies have long-standing disputes of their own. On the economic front, the Beaufort Sea dispute involves a 6250 nm² wedge of water space off the coast of Alaska and the Yukon Territory (see Figure 5). Essentially, the disagreement that created this area arises from how the two countries extend their border from the land into the sea. Canada maintains that the land border between Alaska and the Yukon Territory constitutes the corresponding prolongation of the land border (along the 141°W) into the Beaufort Sea out to the 200 nm EEZ limit. Meanwhile, the U.S. asserts that the border is established by an equidistant line from the coast where the two states meet.⁶⁷

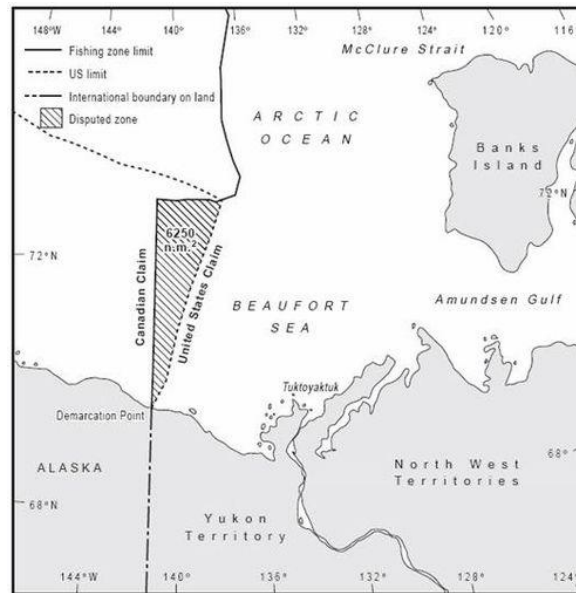


Figure 5. Area of Disputed U.S. and Canadian Claims in the Beaufort Sea⁶⁸

Meanwhile, both countries continue to pursue exploratory operations in the Beaufort Sea in an attempt to locate—and ultimately exploit—any potential

⁶⁷ James Baker and Michael Byers, “The Beaufort Sea Boundary Dispute: Identifying and Assessing Options,” Michael Byers on Politics, February 25, 2010, <http://byers.typepad.com/files/baker-byers-discussion-paper-25-feb-2010.pdf>, 1.

⁶⁸ Arctic Economics, “Where is the Beaufort Sea Boundary between the U.S. and Canada?” August 26, 2009, http://benmuse.typepad.com/arctic_economics/2009/08/us_canada_beaufort_sea_boundary.html.

hydrocarbons in their respective jurisdictions. Both countries have auctioned licenses for exploration in the disputed area; however, Canada has simultaneously issued work prohibition orders on lots in this vicinity (see Figure 6). U.S. attempts to lease lots, meanwhile, have failed to attract any bids, “reportedly because oil companies were concerned about the legal uncertainty associated with the unresolved boundary.”⁶⁹ These attempts, therefore, have not resulted in any reaction beyond diplomatic demarches, and the area remains relatively undeveloped by both parties.

In isolation, this territorial dispute is unlikely to lead to any significant altercations between the two states, and Russia has no stake in the issue. As Baker and Byers point out, there are indications that Canada is willing to seek an agreeable compromise with the United States over the issue, and that from an economic viewpoint, concessions would result in negligible financial losses to either side owing to other existing agreements and policies.⁷⁰ Indeed, these two allies have a strong legacy of cooperation and teamwork in the Arctic, and a joint venture in the disputed area is a likely interim solution while a final agreement is negotiated. But, as with the Bering Sea dispute, as long as the issue remains unsettled, there is a potential for future conflict over its prospective and known resources, especially when challenged in the context of a more sensitive and emotionally-charged issue in U.S.-Canadian relations.

⁶⁹ Baker and Byers, “The Beaufort Sea Boundary Dispute,” 2.

⁷⁰ *Ibid.*, 5.

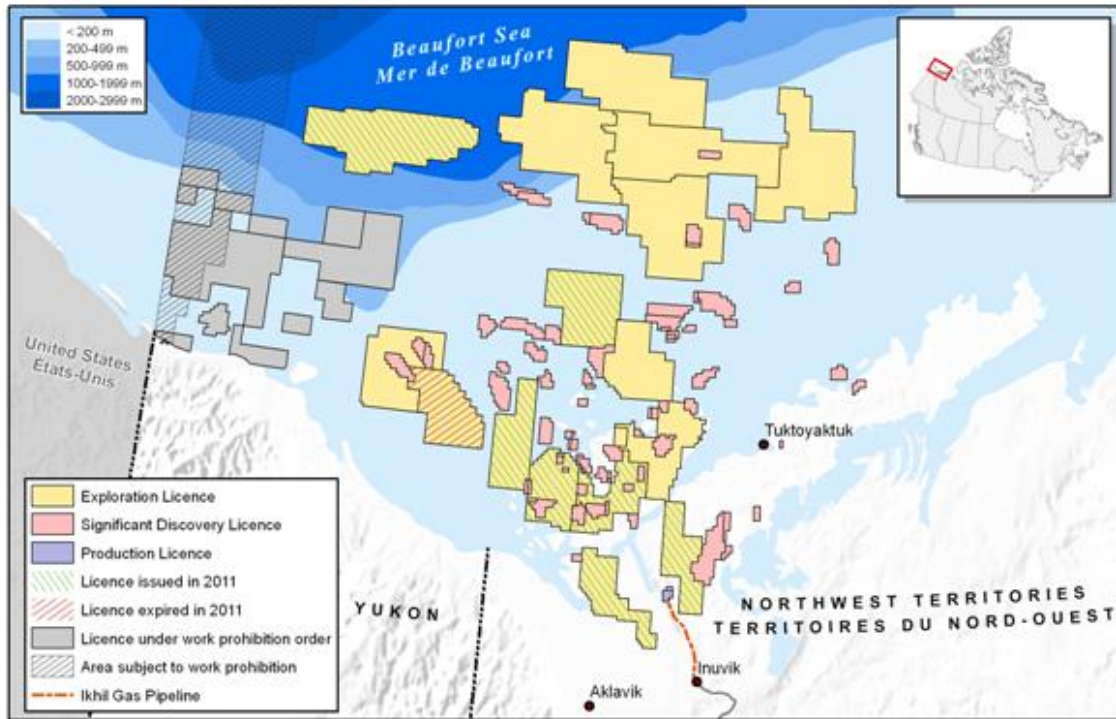


Figure 6. Canadian Oil and Gas Exploration and Exploitation Lots in the Beaufort Sea⁷¹

d. The Northwest Passage – Canada and the United States

On the political front, the status of the Northwest Passage (see Figure 7) remains a point of sharp contention between Canada and the United States. The issue centers exclusively on the two countries' differing recognition of the straits through the Canadian Arctic archipelago. When the straits were covered with ice, the difference went relatively unnoticed, but two incidents in particular brought the dispute to the forefront of political posturing between the two countries, inflaming deep concerns over sovereignty on the part of Canada, and a negative precedent for freedom of navigation on the part of the United States.

⁷¹ Northern Oil and Gas Branch of Aboriginal Affairs and Northern Development Canada, "Northern Oil and Gas Annual Report 2011," Government of Canada (2012), <http://www.aadnc-aandc.gc.ca/eng/1335971994893>.



Figure 7. The Northwest Passage (Red/Bottom) and Northeast Passage (Green/Top)⁷²

In an attempt to test whether the Northwest Passage could be utilized by commercial traffic, the SS Manhattan, an ice-strengthened American super-tanker, and an escort icebreaker, USCGC Northwind, ventured into the ice-packed strait in 1969 without notifying the Canadian government in advance, though Canada subsequently “grant[ed] permission anyway.”⁷³ At the time, Canada only claimed a 3 nm territorial water limit, and therefore, a corridor through the islands existed that did not fall under Canadian jurisdiction. This voyage, while unsuccessful, provoked a fear among Canadians that “a

⁷² Image credit: le Cercle Polaire, “The (Political) Opening of the Northern Sea Route,” *Le Cercle Polaire* (October 2009), http://www.lecerclepolaire.com/En/newsviews/route_du_nord_news.html.

⁷³ Michael Byers and Suzanne Lalonde, “Who Controls the Northwest Passage?” *Vanderbilt Journal of Transnational Law* 42 No. 4 (October 2009), (Nashville: Vanderbilt University, 2009), 1148. <http://www.vanderbilt.edu/jotl/manage/wp-content/uploads/Lalonde-Byers-final-cr-v2.pdf>.

practice [of using the Canadian archipelago] for navigation may evolve among states”⁷⁴ and open up the True North to all the hazards associated with such commercial activity, especially pollution.

Rather than being viewed as an opportunity for bilateral cooperation and exploration of the Passage, the first voyage of the *Manhattan* became a watershed for the formal declaration of Canada’s right of ownership of the Passage. Shortly after the first voyage, the Canadian government unveiled its plan to pass pollution legislation specifically for the Arctic in its *Speech from the Throne*, dated 23 October 1969. This legislation, along with other strategies, was intended to exercise functional sovereign control over the Passage.⁷⁵

When the *Manhattan* encountered severe Canadian restrictions on its movements during a second attempt, the United States responded by reaffirming its position that the Northwest Passage was an international strait, cutting oil imports from Canada by 20 percent, and authorizing the construction of the USCGC Polar Sea, “the most powerful non-nuclear icebreaker in the world.”⁷⁶

In 1985, the USCGC Polar Sea was dispatched by the United States government on a “freedom of navigation” mission through the Northwest Passage. As such, the U.S. Government did not give prior notification to the Canadian authorities, but rather merely informed them that the cruise was taking place and specified its explicit purpose. The Canadians reiterated their policy regarding the Northwest Passage, but retroactively provided permission and offered assistance to the ship.⁷⁷

The resulting political agitation had two relevant consequences. The first was the Canadian issuance of the “Territorial Sea Geographical Co-ordinates (Area 7) Order of 10 September 1985,” (see Figure 8) which drew contentious straight baselines

⁷⁴ Don McRae, “The Negotiation of Article 234,” in *Politics of the Northwest Passage*, ed. Franklyn Griffiths (Kingston: McGill-Queen’s University Press, 1987), 99–100.

⁷⁵ Andrea Charron, “The Northwest Passage in Context,” Canadian Ministry of National Defense, July 14, 2008, <http://www.journal.forces.gc.ca/vo6/no4/north-nord-02-eng.asp>.

⁷⁶ Ibid.

⁷⁷ Michael Byers, *Who Owns the Arctic?: Understanding Sovereignty Disputes in the North* (Vancouver: D&M Publishers Inc., 2009), 52.

around Canada.⁷⁸ The United States and the European Community (EC) both immediately protested these “excessive baselines” which effectively enclosed the Northwest Passage within their limits and made it an internal Canadian waterway.⁷⁹ Secondly, the United States and Canada eventually signed an “Agreement on Arctic Cooperation” in 1988 which essentially codified the existing deadlock in the status of the Northwest Passage while allowing both nations to continue utilizing the area: the United States promised to always ask for permission to enter waters claimed by Canada, Canada agreed to always grant permission to the United States, and nothing about the agreement was to be construed as an abandonment of their respective positions regarding the status of the strait.⁸⁰

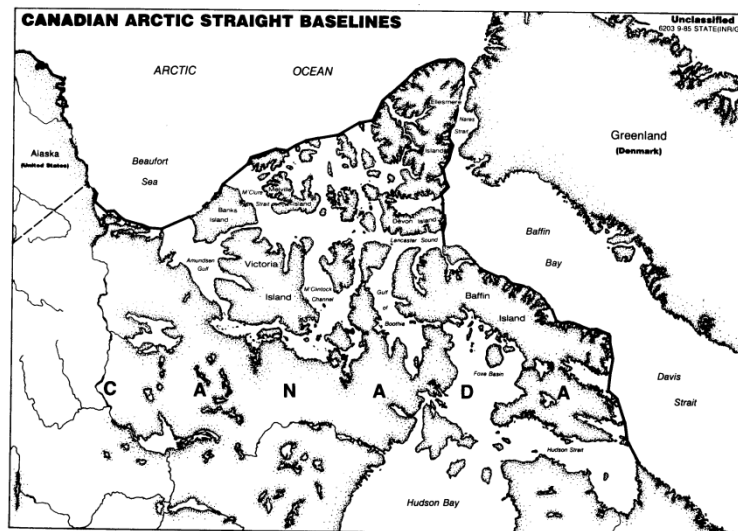


Figure 8. Canadian Baselines Enclosing Its Archipelagic Waters⁸¹

Today, Canada continues to assert that the various waterways that make up the Northwest Passage are internal waters, and therefore subject to the exclusive authority and sovereign rights of Canada. The government of Canada has claimed since at

⁷⁸ United Nations, “The Territorial Sea Geographical Co-ordinates (Area 7) Order,” September 10, 1985, http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/CAN_1985_Order.pdf.

⁷⁹ U.S. Department of State, “Limits in the Seas: United States Responses to Excessive Maritime Claims,” No. 112, March 9, 1992, <http://www.state.gov/documents/organization/58381.pdf>, 29–30.

⁸⁰ United Nations, “Agreement on Arctic Cooperation,” January 11, 1988, <http://treaties.un.org/doc/publication/unts/volume%201852/volume-1852-i-31529-english.pdf>.

⁸¹ Map taken from U.S. Department of State, “Limits in the Seas,” 31.

least 1969 that they are “historic internal waters.” According to Michael Byers and Suzanne Lalonde, “Under international law, a country may validly claim title over waters on historic grounds if it can show that it has, for a considerable length of time, effectively exercised its exclusive authority over the maritime area in question. In addition, it must show that, during the same period of time, other countries, especially those directly affected by the exercise of authority, have acquiesced in it.”⁸² As Byers and Lalonde go on to note, however,

Even if Canada has effectively exercised its exclusive authority over the maritime area claimed, it still has to satisfy the acquiescence criterion. [Donat] Pharand considers this to be a fatal flaw in Canada’s historic waters argument, for none of the early activity was coupled with an explicit claim to the straits and channels between the islands, while the United States opposed later explicit expressions of the claim.⁸³

The United States and the European Union (EU) maintain that the Northwest Passage constitutes an international strait connecting two high seas. This means that foreign-flagged ships are entitled to transit passage through such waters without providing advance notice to the state regulating them. As the transits of the SS Manhattan and USCGC Polar Sea demonstrate, the United States has attempted to exercise its right to freedom of navigation and thereby established that the requisite *opinio juris*⁸⁴ does not exist to support Canada’s claims. As the straits become open to navigable traffic on a more routine basis, other states will also likely seek to utilize the Northwest Passage for transit and further undermine Canada’s case.

⁸² Byers and Lalonde, “Who Controls the Northwest Passage?” 1153–1154.

⁸³ Ibid., 1155.

⁸⁴ According to the Law Information Institute of the Cornell University Law School, “*opinio juris* is the second element (along with state practice) necessary to establish a legally binding custom. *Opinio juris* denotes a subjective obligation, a sense on behalf of a state that it is bound to the law in question. See ICJ Statute, Article 38(1)(b) (the custom to be applied must be ‘accepted as law’). Whether the practice of a state is due to a belief that it is legally obliged to do a particular act is difficult to prove objectively. Therefore, *opinio juris* is an unsettled and debated notion in international law.” The Institute goes on to note that in the North Sea Continental Shelf Cases (West Germany v. Neth./Denmark) (1968–69), the judges of the International Court of Justice held “that states’ frequent or habitual performance of certain actions does not, by itself, establish *opinio juris*.” See http://www.law.cornell.edu/wex/opinio_juris_international_law.

So what is at stake here? If the Northwest Passage were recognized as internal waters, the ability of the United States to exercise freedom of navigation in other parts of the world, most importantly in the Strait of Hormuz, could be undermined by such a precedent in international law. This would jeopardize its “strategic mobility” as well as subject its economic interests to increased logistic costs and uncertainty.⁸⁵ Byers and Lalonde respond that such worries are “misplaced” and over-inflated,⁸⁶ but the “freedom of the seas” argument remains highly persuasive to senior government officials in the United States all the same. For Canada, uncontrolled transit passage through the area would not just be a blow to the pride and nationalism that Canadians have invested in the cause of Canadian Arctic sovereignty and “territorial” integrity. More pragmatically, uncontrolled transit passage could also result in significant increases in expenditures for regulation and law enforcement, not to mention the environmental impact it would have on the highly fragile ecosystem and the way of life of the Arctic’s indigenous population.

At present, neither side is willing to give, though domestic interest in the question in the United States is nowhere near the level noted in Canada. Thus, the Canadian government is under tremendous domestic pressure to secure a resolution to the issue on Canadian terms. Stephen Harper, the Prime Minister of Canada since 2006, made the Arctic a key election campaign issue, and since his installment, he has carried through on a number of policies to better secure Canada’s sovereignty over the Arctic. In addition to expanding the Canadian military and law enforcement presence in the Arctic, his government is committed to developing the infrastructure in the region to support it.⁸⁷ Parliamentarians, meanwhile, have even gone so far as to propose changing the name of the strait to the *Canadian* Northwest Passage in an effort to strengthen their claims and

⁸⁵ Byers and Lalonde, “Who Controls the Northwest Passage?” 1203.

⁸⁶ Ibid., 1204–1205.

⁸⁷ Ibid., 1192–1198.

attach an official Canadian identity to it, a motion supported by all parties, including the opposition, but seen by some academics as expressing insecurity about Canada's legal claims more than confidence.⁸⁸

As to the likelihood that this issue could escalate to militarized conflict, the chances at present are low. Close cooperation between the two nations' militaries persists and continues to expand, specifically into the maritime domain.⁸⁹ So long as the United States does not press the issue with another unannounced transit, it is likely that the *status quo* will suffice to prevent a show or demonstration of force. The same applies to Canadian actions: so long as Canada does not make an attempt to restrict or deny passage to any ships for political reasons, the United States will have little motive to intervene in Canada's regulation and management of these waterways. Given the political sensitivities associated with the Northwest Passage, however, it is not unreasonable to expect that the potential for conflict will escalate and deescalate with their respective electoral cycles as pro-military or pro-sovereignty campaign rhetoric and promises could provoke posturing (threats or displays of force) by the other side.

Finally, the issue of internal versus international waters presents Russia with an opportunity to increase its diplomatic capital with Canada while simultaneously undermining the relationship between Canada and the United States. While most of the length of the Northeast Passage clearly consists of international waters, there are several points along the route that fall into Russian-claimed "internal" waters (see Figure 7). Michael Byers has noted that the common position between the two countries provides for a stronger voice in advocating it in relevant international fora. In his view, they must act now to secure a "joint Russian-Canadian position on the legal status of the Northern Sea Route and Northwest Passage—before it's too late."⁹⁰ Byers holds that "cooperation

⁸⁸ Randy Boswell, "Rechristening Northwest Passage Shows Canada's Insecurity, Expert Fears," *Who Owns the Arctic? Arctic Sovereignty and International Relations Blog*, ed. Michael Byers, October 8, 2009, <http://byers.typepad.com/arctic/2009/10/rechristening-northwest-passage-shows-canadas-insecurity-expert-fears.html>.

⁸⁹ Byers and Lalonde, "Who Controls the Northwest Passage?" 1192–1193.

⁹⁰ Michael Byers, "Canada Can Help Russia with Northern Sea Route," *The Moscow Times*, June 8, 2012, <http://www.themoscowtimes.com/opinion/article/canada-can-help-russia-with-northern-sea-route/460127.html>.

[in other areas] provides Russia and Canada with a narrow window of opportunity. With foreign shipping companies looking north, it is only a matter of time before other countries join the United States in overtly opposing Russia[‘s] and Canada’s internal waters claims.”⁹¹ Not only would such a joint position raise the ire of the United States and lead to the same posturing as noted in the past, but it could also undermine Canada’s positive political and military relations within NATO, since many Alliance members and EU countries stand to lose out economically if these routes become subject to the permission and transit restrictions of other nations. Disunity within NATO is obviously in the interests of Russia, which feels increasingly encircled by NATO. As is discussed later in this chapter in the section on capability, unilateral action by any other Arctic state will not be enough to restrain Russia’s activity and claims in the region.

e. Hans Island – Canada and Denmark

The final unresolved issue in international Arctic affairs involves a small barren “rock” less than one nm² in area between Canada’s Ellesmere Island and Greenland called Hans Island (see Figure 9). The dispute between Canada and Denmark has resulted in several diplomatic spats and displays of force between the two countries,⁹² but recent press articles indicate that the two countries could possibly reach an agreement before the end of 2013.⁹³ While Hans Island is an almost inconsequentially small piece of land, it is strategically important to both nations, not only due to political promises and pressure to defend their respective Arctic sovereignty, but also because the keeper of Hans Island is also the keeper to the gates of the Arctic in a key choke point.

⁹¹ Ibid.

⁹² Byers, *Who Owns the Arctic?*, 22. Also, Huebert, “The Newly Emerging Arctic Security Environment,” 10–11. For an excellent overview of significant events in the Canadian-Danish back-and-forth over Hans Island through 2005, see the timeline at “Whose Hans,” Canadian Geographic Enterprises (2005), <http://www.canadiangeographic.ca/hansIsland/time.asp>.

⁹³ John Ibbitson, “Dispute over Hans Island nears Resolution. Now for the Beaufort Sea,” *The Globe and Mail*, January 26, 2011, <http://www.theglobeandmail.com/news/politics/dispute-over-hans-island-nears-resolution-now-for-the-beaufort-sea/article563692/>. Also, Adrian Humphreys, “New Proposal Would See Hans Island Split Equally between Canada and Denmark,” *National Post*, April 11, 2012, <http://news.nationalpost.com/2012/04/11/new-proposal-would-see-hans-island-split-equally-between-canada-and-denmark/>.



Figure 9. Hans Island⁹⁴

It is highly unlikely, in the interim, that the dispute will escalate to the use of force between these two NATO allies, but a stalemate in negotiations could increase tensions that might hamper cooperation in other domains, especially scientific research (in support of continental shelf claims) and collective defense, or lead to a resumption of periodic displays of force and occupations. The United States and Russia are not concerned with this dispute, however, and any escalation in tensions will remain between Canada and Denmark.

3. Summary

Receding ice cover in the northern cryosphere presents Arctic nations, and others, with considerable economic opportunities. Whether to exploit a potential treasure trove of natural resources or simply capitalize on money-saving transportation routes, political leaders are under increasing pressure to resolve previously frozen or otherwise

⁹⁴ Image credit: "Whose Hans?" Canadian Geographic Enterprises (2005), <http://www.canadiangeographic.ca/hansisland/maps.asp>.

insignificant disputes and make these resources available as soon as possible to their constituents. Lack of resolution is bad for business: it creates a wild west (or, in this case, a no-law north) of uncertainty as to one's legal standing and exposes countries and companies alike to unnecessary harassment and possibly prosecution by rival interests.

In the dash for dominance, several outstanding issues pose obstacles to a peaceful partition of this Arctic abundance. Disagreements over Hans Island have already led to small-scale displays of force that could escalate if negotiations failed to result in a mutually satisfactory settlement. Meanwhile, politically charged rhetoric over the status of the Northwest Passage has led to an increased militarization of the region by all the Arctic states in attempts to show resolve and an ability to defend claims and enforce sovereignty. While alliances and other cooperative ventures continue to reinforce a spirit of amity, political posturing could threaten to break the existing "agreements to disagree" and turn benign actions into pretexts for displays of force. Finally, when economic developments and disputes are perceived in a larger political-military context by certain actors, setbacks in securing economic interests have the potential to elicit a military response – especially when such interests are regarded as vital to national security.

Increasing economic opportunities go hand-in-hand with an increased presence in the region, creating the environment for conflict. Economic expansion is triggering an associated build-up in military and law enforcement capability in order to protect, defend, and regulate interests and claims. If economic encroachment were not enough to cause anxiety among the Arctic powers, the subsequent militarization of the Arctic has also caused alarm, making countries feel increasingly vulnerable to conventional military pressure from a previously ice-obstructed front. The question becomes: do the military capabilities of the Arctic nations rise to the challenge?

C. CAPABILITY

If opportunity equates to presence and creates the environment for conflict, a second factor to assess when calculating its potential becomes the capability of the Arctic powers to utilize this presence to achieve an objective over an opposing interest. As Giovanni Valvo of *Window on Heartland*, observes, Russia is ahead of the game:

A strengthening of the Russian military presence in the region through the expansion of the Northern Fleet is a means to exercise pressure on the international community, should it not accept the scientific evidence of Moscow's claims. Supremacy in the Arctic would allow Russia not only to exploit its huge energy resources, but also to turn the Northern Sea Route, which travels east via the region to Asia-Pacific markets, into a major international trade route controlled by Moscow. This is why Russia's commitment to the strengthening of the Northern Fleet is more than an effort aimed at bringing the Russian Navy back to the times of the Soviet Union, being rather a sign of the Kremlin's determination to turn it into the cutting edge of tomorrow's Eurasia, an envisaged geo-economic space stretching from the desert steppes of Kazakhstan to the glaciers of the North Pole.⁹⁵

Due to Russia's Arctic basing and order of battle, it currently stands out as the country most capable of asserting and defending "excessive" claims. The combined regional military and law enforcement capability of the other Arctic states (Canada, Denmark, Norway, and the United States—all members of NATO) pales in comparison: those military platforms which are present are optimized for global thermonuclear war (i.e., U.S. ballistic missile submarines) vice the more realistic and likely scenarios of scientific research, search and rescue, law enforcement, and low-intensity conflict.

In order to collect the necessary evidence to support their respective "excessive" economic claims, Arctic states will not only need the technological capability to survey the region—including ships with icebreaking capability—but also a military and/or law enforcement presence capable of defending these claims against rivals, especially in areas where claims overlap. In an anarchic system wherein national leaders tend to view conflict and competition through a realist lens, it is not international law, but military might that functions as the ultimate guarantor of security. If, as the adage goes, "possession is nine-tenths of the law," then the other ten percent is *conventional, collective* deterrence for NATO. In this regard, the words of then-Russian Prime Minister Vladimir Putin ring true in a fashion beyond the spirit of cooperation in which he spoke: "If you stand alone, you can't survive in the Arctic. Nature makes people and states help

⁹⁵ Giovanni D. Dalvo, "Northern Fleet in Russia's Grand Strategy – Analysis," *Window on Heartland: Geopolitical notes on Eastern Europe, the Caucasus and Central Asia Blog*, June 28, 2012, <http://www.windowonheartland.net/search?updated-max=2012-07-05T09:02:00%2B02:00&max-results=1&start=1&by-date=false>.

each other.”⁹⁶ If NATO is to maintain its relevance in the twenty-first century, it must come together as a political-military organization to balance against Russian encroachment in the Arctic, just as much as Russia is doing now against NATO. Whether Moscow’s perception of a NATO threat is valid or not is irrelevant—the perception exists, and a military build-up is occurring.

Since the end of the Cold War in 1991, however, and most recently as a consequence of the 2008 global financial crisis that has affected the defense budgets of most developed countries, many NATO members have shifted their defense priorities elsewhere, and the Arctic region has taken a back seat to more pressing issues. As global climate change continues to open this previously inhospitable zone to economic exploitation, ignoring developments in the region could have profound consequences in the long-term, as both economic and military challenges to NATO’s interests become more salient. Admittedly, a similar build-up of NATO forces in the region only further validates Moscow’s threat perception and therefore the chances of conflict, but it is unavoidable. If Canada is to maintain the legitimacy of its claims as a responsible custodian of the Arctic environment and its inhabitants, it requires a military and law enforcement presence and corresponding infrastructure. The same goes for the ability to maintain a credible and responsive search-and-rescue capability, as pledged by all the Arctic powers,⁹⁷ and in anticipation of their respective constabulary duties as the waters open to more commercial traffic. Certain tasks can be accomplished by the same platforms; but the more duties that they are required to undertake, the greater the number of units that will be necessarily to discharge them, not to mention to provide adequate coverage over such a large area. Only by working together as an alliance can the individual Arctic NATO members provide adequate presence and protection. Thus, this threat analysis turns to the current capabilities of the Arctic nations, followed by an assessment of what is needed to close the capability gap between NATO and Russia.

⁹⁶ Harding, “Vladimir Putin Calls for Arctic Claims to Be Resolved under UN Law.”

⁹⁷ Ibid.

1. Arctic Orders of Battle and Comparative Capabilities Analysis

Ariel Cohen notes that Russia's Arctic icebreaking order of battle currently stands at 18 vessels, seven of which are nuclear powered.⁹⁸ Significantly, this specialized fleet is constantly operating in the Arctic, and the nuclear propulsion capability of seven of these vessels gives them an endurance potential that is unmatched by the ships of any other nation. Not only do the Russians have a robust ability to conduct research and stake claims in the High North, they have the ability to reach and support them, and an entire military and coast guard fleet of armed ships to defend them. On the other hand, several of these ships are in dire need of life extension overhauls, and the maintenance and operational costs of these vessels are extremely high. Given the current demand and high price for hydrocarbons exported by Russia, however, the Russians are in a good position to assume the costs; and they have planned the construction of four or five new nuclear icebreakers to be completed around 2014–17.⁹⁹ The new-found wealth in Russia's coffers has also provided an opportunity to modernize the rest of its aging military fleet. In February 2012, then-Prime Minister Vladimir Putin announced that "Russia cannot rely on diplomatic and economic methods alone to resolve conflicts. Our country faces the task of sufficiently developing its military potential as part of a deterrence strategy. This is an indispensable condition for Russia to feel secure and for our partners to listen to our country's arguments."¹⁰⁰

In comparison, Norway, its nearest Arctic neighbor, only operates one icebreaker, the recently built KV *Svalbard* (commissioned in 2001).¹⁰¹ Having settled its one remaining Arctic territorial dispute with Russia in 2010, the Norwegian government likely (and prudently) judges that this is sufficient to meet its own constabulary and security needs in the region.

⁹⁸ Cohen, "Russia in the Arctic," 23.

⁹⁹ Oleg Bukharin, "Russia's Nuclear Icebreaker Fleet," *Science and Global Security* 14 (2006): 26–27.

¹⁰⁰ Vladimir Putin, "Being Strong: Why Russia Needs to Rebuild Its Military," *Foreign Affairs*, February 21, 2012, http://www.foreignpolicy.com/articles/2012/02/21/being_strong.

¹⁰¹ Marinelog.com, "DNV Classes Norwegian Coast Guard Icebreaker," March 12, 2001, <http://www.marinelog.com/DOCS/NEWSMMII/MMIIMar12.html>.

Farther west, Denmark's Arctic territory of Greenland is assigned one helo-capable Arctic patrol ship, two additional Arctic patrol vessels, and an Arctic patrol cutter. The Danish Navy has three operational icebreakers, but one is only fitted for survey missions in non-ice waters and the remaining two are incapable of operating in the multiyear ice of the Arctic.¹⁰² Even when the ice extent is at its nadir in September, the ice pack around Greenland is still too thick to safely operate these vessels. They are, therefore, limited in operation to the perennial ice of the Baltic Sea.

Meanwhile, Canada remains the only Arctic nation besides Russia that is actively seeking to bolster its presence and capability in the region in order to defend its claims and meet the law enforcement and environmental challenges that a more accessible Arctic presents. In addition to Canada's current fleet of six Arctic-capable icebreakers,¹⁰³ plans are already underway to build at least one new one (to be ready by 2017),¹⁰⁴ as well as six to eight new ice-capable armed patrol vessels (based on the Norwegian *Svalbard* Class) for patrolling the "internal" waters of Canada's claimed archipelago¹⁰⁵ year round.¹⁰⁶ Until these ships are commissioned (in 2015 at the earliest),¹⁰⁷ the Canadian Navy is only able to patrol the Arctic in the spring, summer, and autumn when there is no ice cover. Meanwhile, Canada is also planning to install an Army training center and to

¹⁰² IHS Jane's, "Danbjørn Class," and "Thorbjørn Class," *Janes Fighting Ships*, (Jane's Information Group, 2011), <http://www.janes.com> (accessed March 2, 2012). Also, IHGS Jane's, "Navy (Denmark)," *Jane's Sentinel Security Assessment – Western Europe*, (IHS Global Limited, 2012), <http://www.janes.com> (accessed March 2, 2012).

¹⁰³ The National Academies, *Polar Icebreakers in a Changing World: An Assessment of U.S. Needs* (Washington, DC: The National Academies Press, 2007), 59.

¹⁰⁴ Government of Canada, "The John G. Diefenbaker National Icebreaker Project," August 28, 2008, <http://pm.gc.ca/eng/media.asp?id=2252>.

¹⁰⁵ Such a claim has significance under the UNCLOS under Part IV concerning Archipelagic States. Article 47 authorizes Archipelagic States to "draw straight baselines joining the outermost points of the outermost islands," and under Article 50 to "draw closing lines for the delimitation of internal waters." Under Article 49, the State is granted full sovereignty over the enclosed waters, and airspace. Other States could dispute such claims, however, on the grounds that Article 46(a) defines an Archipelagic State as one that is "constituted *wholly* by one or more archipelagos." (emphasis added).

¹⁰⁶ UPI.com, "Canada Goes Ahead with Arctic Patrol Ships," July 25, 2011, http://www.upi.com/Business_News/Security-Industry/2011/07/25/Canada-goes-ahead-with-Arctic-patrol-ships/UPI-40851311626012/.

¹⁰⁷ Government of Canada, "Arctic/Offshore Patrol Ships," January 13, 2012, <http://www.forces.gc.ca/site/pri/2/pro-pro/artic-eng.asp>.

renovate an already existing deep water port in the Arctic region to support its anticipated law enforcement and military presence operations.¹⁰⁸

Unfortunately, the final Arctic power and long-standing NATO leader, the United States, is not in a position to handle many of its expected and necessary roles as the Arctic opens up. Despite efforts by Presidents Clinton, Bush, and Obama, the U.S. Senate has repeatedly failed to ratify the United Nations Convention on the Law of the Sea—a treaty regime that would give the country a “seat at the table” to make its own Arctic claims (delineation) and to defend against excessive claims by other nations which may overlap with legitimate American ones (delimitation). In short, the United States is without full legal standing in the Arctic maritime domain when it comes to the exploitation and defense against encroachment of its potentially vast deposits of hydrocarbon resources.

In matters of law enforcement and constabulary regulation of waters even within its uncontested Arctic EEZ, the United States is likewise without defense or effective footing. As it currently stands, the United States has only one operational icebreaker, and it is incapable of operating independently in heavy ice conditions. Another icebreaker is out of service for a life-extending overhaul (having been taken out of caretaker status), and it will be unavailable until at least 2013. A third is immobilized by an engine failure, and it is to be decommissioned. Exasperated calls by the Coast Guard for funding to both acquire new platforms and extend the service lives of its three remaining icebreakers as a stop-gap measure continue to receive little attention on Capitol Hill and thus remain unappropriated.

The effect is already being felt. When engine problems immobilized the USCGC Polar Sea in 2010, the McMurdo research station in Antarctica did not receive its supply shipment and could not conduct research until a Russian icebreaker was chartered to accomplish the mission.¹⁰⁹ Even with two operational icebreakers (and the construction

¹⁰⁸ CBC News, “Harper Announces Northern Deep-Sea Port, Training Site,” August 11, 2007, <http://www.cbc.ca/news/canada/story/2007/08/10/port-north.html>.

¹⁰⁹ Sam LaGrone, “Todd Pacific Shipyards Wins \$16m Icebreaker Modification Contract,” *Jane’s Navy International* (HIS Global Limited, 2011), January 14, 2011, <http://www.janes.com> (accessed March 2, 2012).

of two more), the United States will be unable to fulfill its obligations in the Antarctic region in addition to the Congressionally-mandated ones in its own Arctic backyard: support to commercial traffic, law enforcement, environmental protection, and research and survey operations, among many others. The U.S. Government Accountability Office report released in December 2011 notes that defense readiness and waterway security are already “significantly” degraded by the lack of current capability.¹¹⁰ In short, the U.S. Arctic naval and law enforcement capability is already stretched to the point of inadequacy. The demands for its services can only be expected to increase in the coming decades.

2. Projected Capability Needs Assessment

The National Academies assessment on U.S. needs entitled *Polar Icebreakers in a Changing World* concluded that “new construction is most desirable from the perspective of both reliability and incorporating the newest and best available technology.”¹¹¹ While outsourcing some of the Coast Guard’s missions (such as survey and research) might be possible, many of its statutory mandates require that the vessel be owned by the government and that the missions be conducted by trained and qualified Coast Guard personnel only (for instance, sovereignty operations and law enforcement functions). The assessment considered service life extensions on existing icebreakers as another option, but the time and money involved make it a rather weak and ineffective stop-gap measure. Eventually new icebreakers must be built. The money and time spent on life-extensions would be a wasted investment. The committee conservatively concluded that a minimum of two new ships (to make three in total) are necessary to minimally fulfill Coast Guard missions.¹¹²

¹¹⁰ U.S. Government Accountability Office, “Coast Guard: Observations on Arctic Requirements, Icebreakers, and Coordination with Stakeholders,” Testimony Before the Subcommittee on Coast Guard and Maritime Transportation, Committee on Transportation and Infrastructure, House of Representatives, December 1, 2011, <http://www.gao.gov/assets/590/586574.pdf>, 19.

¹¹¹ The National Academies, *Polar Icebreakers in a Changing World: An Assessment of U.S. Needs*, 85.

¹¹² *Ibid.*, 100.

In his testimony to Congress on the Arctic requirements of the United States Coast Guard, Stephen L. Caldwell, Director of the Coast Guard's division of Homeland Security and Justice, cited the findings and recommendations of the High Latitude Study Mission Analysis Report prepared for the Coast Guard in July 2010. This report called for a minimum of six new icebreakers (three heavy and three medium) to be funded and built immediately, just to meet the statutory missions of the service. Caldwell further noted that, "if Navy presence requirements are taken into account, the Coast Guard would require three additional heavy icebreakers and one additional medium icebreaker for a total of ten icebreakers (six heavy and four medium)."¹¹³ This would also bring the combined NATO capability to par with Russia's Arctic order of battle.

On March 1, 2012, the U.S. Coast Guard launched ARCTIC SHIELD 2012, its largest deployment ever to the Arctic, in order to test the ability of both ships and personnel to operate for extended periods in the harsh climate of the region.¹¹⁴ With an inadequate logistics and communications infrastructure, and a single icebreaker incapable of winter operations, such a deployment is already limited in scope and duration; and its findings would be biased toward summertime conditions and therefore not comprehensive. This is nonetheless a positive step forward in collecting evidence to support the case for badly needed funds.

Perhaps it is time for Canada to assume the mantle of leadership within NATO regarding Arctic affairs. As the only NATO ally taking the maritime threat posed by a more capable and economically aggressive Russia seriously, it stands out as the most competent of alliance members to establish an effective doctrine of collective economic security by means of military deterrence. Even Canada's projected strength, however, cannot rise to the challenge alone. In order to present a credible deterrent, Norway and Denmark must also contribute to a more robust collective and sovereign presence by increasing the number of icebreakers and ice-capable armed patrol craft. Finally, all four NATO allies should conduct combined Arctic show-of-force (and capability) exercises in

¹¹³ U.S. Government Accountability Office, "Coast Guard," 13.

¹¹⁴ Kim Murphy, "Coast Guard Beefs Up Deployment in the U.S. Arctic," *Los Angeles Times*, March 1, 2012, <http://www.latimes.com/news/nation/nationnow/la-na-nn-coast-guard-arctic-20120301,0,3177903.story>.

the region, not only to practice operating in the environment, but also to establish and validate a truly sound doctrine for the collective defense of Arctic economic resources and maritime sovereignty. Unfortunately, “the Canadians have made it clear that they do not want NATO involved in the Arctic...It is likely that Canadian opposition was the reason why the Arctic region was not mentioned in the 2010 Strategic Concept or the 2012 Chicago summit declaration.”¹¹⁵

3. Summary

Military rivalries aside, the Arctic members of NATO suffer from a large gap between their political commitments in the region and their ability to honor them. As the Arctic ice continues to recede more quickly every year on average, there is simply no time to waste in beginning the construction of the necessary platforms and infrastructure to fill this gap before the Arctic states become overwhelmed with regulating commercial traffic and conducting defensive patrols. It is this build-up of dual-purpose capabilities, however, that serves to feed Russia’s threat perception of a NATO determined to encircle and “contain” it.

D. INTENT

The only piece missing to confirm the existence of a threat, then, are indications of the intent to use this capability to achieve malign political objectives. As mentioned in the introduction, however, intentions are generally much harder to gauge than capabilities. Strategic communications—including public statements by political figures and purposeful actions designed to demonstrate resolve—are therefore all the more important as indicators of an adversary’s objectives. A survey of such strategic communications and actions reveals a highly ambiguous picture—the fog *before* war (to adapt the famous phrase by Clausewitz): an environment in which miscalculations are more easily made and conflict more easily ignited. Calls for multilateral cooperation and combined exercises are contradicted with abrasive claims of spheres of influence and sovereign rights. Meanwhile, countries seeking to establish their territorial and economic

¹¹⁵ Coffey, “NATO in the Arctic,” 2.

claims in the Arctic are utilizing UN procedural channels while conducting flag-planting expeditions and seeking funds to bolster their ice-capable naval orders of battle. It is in this environment that policy makers must carefully navigate the expanding economic opportunities, the increasing operational capabilities, and the ambiguous intentions of other nations in order to determine when, where, and to what extent conflict is most likely to erupt and be prepared for it through discerning policy, effective posture, and consistent vision.

In the case of Russia, its intent to vigorously establish its presence and its willingness to use force to protect its economic claims in areas of unresolved dispute have been made explicit on numerous occasions in various areas of its periphery. One should expect nothing different in the Arctic, despite less navigable waters. If actions speak louder than words, a realist should have no problem understanding Russia's intent.

1. Indications of Threat and Use of Force

a. The United States v. Russia

In the previous section on opportunity, areas of potential conflict in the Arctic were identified. Aside from the low-level shows of force over Hans Island, the only other remarkable incidents of maritime conflict in the region have involved the U.S. Coast Guard law enforcement actions in the Bering Sea against illegal Russian fishing activity in U.S. waters. Taken in isolation, the reported incidents do not amount to much, aside from the noted consideration of warning shots to demonstrate resolve and deter would-be poachers. This is itself a symptom of an under-resourced force that does not have the necessary capability to establish and enforce a credible operational presence and deterrence potential to accomplish its law enforcement mandates. As any student of customary law is aware, unsettled disputes quickly assume precedent when a government's presence goes unchallenged (cf. the earlier discussion on *opinio juris*). While the Russian Navy or Border Patrol has not been active in defending a claim in the Bering Sea, it has established its own precedent for the use of force elsewhere.

b. Russia v. Japan

According to the Correlates of War database,¹¹⁶ of the 11 maritime altercations involving Russia noted between 1993 and 2001, six were initiated by Russian forces. Four of these disputes involved accusations of poaching, of which three involved aggressive uses of force to attack and seize Japanese vessels. In these particular incidents, Russian coast guard units accused Japanese fishermen of operating in Russian-controlled waters in the vicinity of the Kuril Islands—an area of unresolved dispute between the two nations. Such attacks have escalated since 2001: in August 2006, a Japanese fisherman was killed in a similar altercation.¹¹⁷

Maritime disputes over natural resources are hardly an uncommon occurrence. Indeed, the disputes with the highest potential for rapid escalation are those over hydrocarbons: examples include the Sino-Japanese disputes over resources in the East China Sea (see Figure 10), and China's contentious claim over the Spratly Islands in the South China Sea. Despite the mediating tools of international institutions, these conflicts frequently result in a militarized confrontation, though there has been no instance of escalation to war.

¹¹⁶ Faten Ghosn, Glenn Palmer, and Stuart Bremer, "The MID3 Data Set, 1993–2001: Procedures, Coding Rules, and Description," *Conflict Management and Peace Science* 21 (2004): 133–154, <http://correlatesofwar.org>.

¹¹⁷ BBC News, "Japanese Fisherman Killed by Russians," August 16, 2006, <http://news.bbc.co.uk/2/hi/4797021.stm>.



Figure 10. Disputed Islands and Waters in the East China Sea¹¹⁸

c. *Japan v. China*

The Sino-Japanese dispute over resources and territory is becoming increasingly salient and militarized. According to Mure Dickie, Tokyo Bureau Chief for the *Financial Times*,

Japan's pacifistic constitution may outlaw aggressive war, but in Tokyo there is a firm political consensus that the Senkaku are an integral part of the nation's territory—to be defended by force if necessary. But China, which calls the islands the Diaoyu, appears increasingly willing to test Japan's control by sending state fisheries vessels through their territorial waters. And the tone and martial language of protests in China this month against Japan's purchase of three of the islands made clear that some Chinese at least are spoiling for a fight. Moves by Chinese and Taiwanese state vessels and fishing boats to challenge Japan's de facto control of the islands could lead to a potentially fatal accident that some analysts say could further escalate hostility from China.¹¹⁹

Such observations have likewise been noted officially by the Japanese government in its 2012 Defense White Paper, which cited an increased presence of Chinese law enforcement agencies conducting “monitoring activities” near Japanese

¹¹⁸ Image credit: BBC News. Image taken from BBC News, “No Progress in China-Japan Talks,” May 31, 2005, <http://news.bbc.co.uk/2/hi/asia-pacific/4592881.stm>.

¹¹⁹ Mure Dickie, “Senkaku Spat Reinforces Military Rethink,” *Financial Times*, September 25, 2012, <http://www.ft.com/intl/cms/s/0/ec105b12-06f1-11e2-92ef-00144feabdc0.html#axzz28AV6GjID>.

waters and at least nine separate incidents in which Chinese vessels violated Japanese territorial waters in the vicinity of the Senkaku islands,¹²⁰ including one incident in which a Chinese fishing trawler collided with a Japanese patrol boat.¹²¹ James Manicom, a Post-doctoral Fellow at the Balsillie School of International Affairs in Waterloo, Ontario, and a Visiting Researcher at the Ocean Policy Research Foundation in Tokyo, similarly observes that

There are a growing number of government vessels enforcing jurisdiction in the East China Sea. Both the Chinese and Japanese navies are more active than ever. China also has five different civilian agencies that enforce some aspect of its maritime jurisdiction and the JCG [Japanese Coast Guard] is the only Japanese foreign policy actor that is allowed to open fire on those that violate Japan's maritime jurisdiction. These [Chinese and Japanese naval and law enforcement] agencies do not speak to each other but interact with greater frequency in areas where both China and Japan claim jurisdiction.¹²²

Manicom notes that, considering the lack of success in locating any significant deposits of the estimated 160 to 200 billion barrels of oil or 175 to 210 trillion cubic feet of gas in the area, “the *proven* East China Sea gas fields are not a game changer for the energy security of either state. That doesn't mean that these reserves are not useful, however...From Japan's perspective, the gas reserves are relatively worthless.”¹²³ Thus, in a politically charged environment lacking in transparency, it is the principle, not the substance, of a claim that is important, and evidently worth the cost of defending militarily. According to Japanese Defense Councilor Yasuhisa Ishizuka, “From our crisis-management perspective, it becomes more difficult to interpret intentions and purpose of various actions on the Chinese side.”¹²⁴ The fog before war thus thickens.

¹²⁰ The same islands which are called Diaoyu by the Chinese are referred to as Senkaku by the Japanese.

¹²¹ Japan Ministry of Defense, *Defense of Japan 2012* (Tokyo: Japan Ministry of Defense, 2012), http://www.mod.go.jp/e/publ/w_paper/2012.html, Part 1, Chapter 1, Section 3, Page 10.

¹²² Chris Acheson, “Disputed Claims in the East China Sea: An Interview with James Manicom,” The National Bureau of Asia Research, July 25, 2011, http://www.nbr.org/downloads/pdfs/PSA/Interview_Maincom.pdf, 4.

¹²³ *Ibid.*, 2. Emphasis in the original.

¹²⁴ Yuka Hayashi, “Tokyo Seeks to Expand Defense against China,” the *Wall Street Journal*, July 31, 2012.

d. China v. Vietnam, the Philippines, Malaysia, and Brunei

Farther south, another five-nation dispute has led to even more significant militarized conflict over the Spratly Islands (among others) in the South China Sea (see Figure 11). Even as far back as the Second World War, Japan laid claim and defended these islands in order to exploit their vast reserves of hydrocarbon resources. Now, China, Vietnam, the Philippines, Malaysia, and Brunei compete to secure their rightful claims to this lucrative and strategic area. This competition has escalated on numerous occasions to include not only threats of force, but uses of force including direct fire, occupations, seizures, arrests, and killings.¹²⁵



Figure 11. Disputed Islands and Waters in the South China Sea¹²⁶

It is therefore evident that ample precedent for countries to engage in low-level conflict over natural resources exists, including the countries in question, Russia and the United States. There is no substantiated reason to presume that Arctic states are any less likely to resort to force in that region when similar interests are at stake.

¹²⁵ Jörn Dosch, "The Spratly Islands Dispute: Order-Building on China's terms?" *Harvard International Review*, August 18, 2011, <http://hir.harvard.edu/the-spratly-islands-dispute-order-building-on-china-s-terms>.

¹²⁶ Image credit: BBC News, taken from BBC News, "Q&A: South China Sea Dispute," June 27, 2012, <http://www.bbc.co.uk/news/world-asia-pacific-13748349>.

Naturally, appeals for diplomacy are a prudent and economically wise first step, but when diplomacy is incapable of achieving a resolution, some nations may resort to force. According to Article 51 of the UN Charter, “Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken the measures necessary to maintain international peace and security.”¹²⁷

2. Indications of Intent to Use Force

If actions alone are not enough evidence to support an assessment of an intention to use force, however, then it is necessary to examine the political rhetoric and strategic communications, as well as the motivations behind them, to better understand the intent of Russia to defend its diplomatic claims with military might if necessary.

a. Russia’s Motivation

The resources in the Arctic are of much more vital importance to the Russian government than the fishing grounds in the Pacific. While estimates vary widely, they generally indicate that 35 to 50 percent of the Russian federal budget derives directly from hydrocarbon export taxes and sales.¹²⁸ Whereas many economists regarded “the rapid growth in virtually every sector of the Russian economy” during President Putin’s first two terms in office (2000–2008) as a proof that the economy was diversifying away from a dependence on oil, Clifford Gaddy and Barry Ickes demonstrate quite vividly how “the abrupt collapse of oil prices in the summer of 2008 made it hard to ignore how dependent these other sectors had been on the high oil prices” of the previous eight

¹²⁷ United Nations, “Charter of the United Nations,” Chapter VII, Article 51, June 26, 1945, <http://www.un.org/en/documents/charter/intro.shtml>.

¹²⁸ See, for example the investment prospectus for TNK-BNP by Vladislav Kovalchuk, “Russian Oil Sector Taxation: Federal Budget Wealth or Oil Sector Health?” BNP Paribas Investment Partners, December 10, 2011, http://www.tkb-bnpparibasip.info/i_eng/msg_i/140/p1112021_russian_budget_oil_v3.pdf?941. Also, the International Tax and Investment Center Bulletin edited by Diana Napolitano, “Ministry of Finance of the Russian Federation Expert Meeting on Oil and Gas Taxation,” ITIC Bulletin Special Edition, July 2011, http://www.iea.org/work/2011/tax_russia/Moscow_bulletin.pdf. Also, Jacques Sapir, “Russia Regional Report: Business as Usual, Despite the Financial Crisis,” *World Oil Online*, 323, No. 1, January 2011, <http://www.worldoil.com/Business-as-usual-in-Russia,-despite-the-financial-crisis-January-2011.html>.

years.¹²⁹ This reliance on natural resources is probably a key reason that, in the latest Russian Arctic Strategy, they were described as a strategic resource for national security.¹³⁰

In order to protect Russia's interests in the Arctic, therefore, the Russian National Security Strategy calls for increasing the role of the military in the region and even states, "In case of a competitive struggle for resources it is not impossible to discount that it might be resolved by a decision to use military might."¹³¹ With the largest Arctic fleet in the world, both in terms of military assets and icebreaking support vessels, Russia is well-positioned to back up its policy with action. A broader look reveals that in addition to bolstering their maritime presence in the Arctic, the Russians have also increased their air and ground presence in the region—further increasing NATO's uneasiness that Moscow is re-militarizing the Arctic. In addition to Defense Minister Anatoly Serdyukov's announcement of the creation of two Arctic brigades "to protect its valuable Arctic resources," then-Prime Minister Vladimir Putin stated, "As [far as] our own geo-political interests [in the Arctic] are concerned, we shall be protecting them firmly and consistently."¹³² In July 2012, Vladimir Putin, in his capacity as president, clarified that "the navy is an instrument to protect national economic interests, including in such regions as the Arctic," and that he expected to increase Russia's naval order of battle by 51 units by 2020.¹³³ Finally, while the Russian Foreign Minister stated in 2008 that "Russia strictly abides by the norms and principles of international law and is firmly determined to act within existing international agreements and mechanisms,"¹³⁴

¹²⁹ Clifford D. Gaddy and Barry W. Ickes, "Russia after the Global Financial Crisis," *Eurasian Geography and Economics* 51, No. 3 (2010): 284, doi: 10.2747/1539-7216.51.3.281.

¹³⁰ Dmitry Medvedev, "Osnovy gosudarstvennoi politiki Rossiiskoi Federatsii v Arktike na period do 2020 goda i dal'neishuyu perspektivu," Security Council of the Russian Federation, September 8, 2008, <http://www.scrf.gov.ru/documents/98.html>.

¹³¹ Dmitry Medvedev, "Strategiya natsional'noi besopasnosti Rossiiskoi Federatsii do 2020 goda," Security Council of the Russian Federation, May 12, 2009, <http://www.scrf.gov.ru/documents/99.html>.

¹³² Thomas Grove, "Russia Creates Two Brigades of Arctic Troops," *Reuters*, July 1, 2011, <http://uk.reuters.com/article/2011/07/01/russia-arctic-troops-idUKLDE76017D20110701>.

¹³³ Gleb Bryanski, "Russia to Get Stronger Nuclear Navy, Putin Says," *Reuters*, July 30, 2012, <http://www.reuters.com/article/2012/07/30/us-russia-putin-navy-idUSBRE86T1D320120730>.

¹³⁴ Dow Jones Newswires, "Russia Denies Plans to Carry Out 'Unilateral Partition' of Oil-Rich Arctic," September 23, 2008, http://www.rigzone.com/news/article.asp?a_id=67031.

it is important to remember that the country has repeatedly, before, during, and after this statement, violated international agreements and failed to utilize conflict resolution mechanisms to settle disputes in other parts of the world.¹³⁵

b. The NATO Perspective

As mentioned earlier, NATO has continued to ignore the Arctic as a potential theater of operations. In a certain respect, this does help mute Russia's charges of a NATO-led militarization of the Arctic; but when four of the five Arctic nations are NATO members, a connection can still be drawn. Therefore, whether the organization ever formally institutes an Arctic strategy of its own, Russia will probably continue to perceive the individual actions of the other nations in a NATO context.

Meanwhile, Canada, the most vocal opponent of NATO involvement in the Arctic, is also the most rhetorically determined regional state aside from Russia. During an annual tour of the "True North," Prime Minister Stephen Harper commented that "The first and highest priority of our northern strategy is the protection of our Arctic sovereignty. And as I have said many times before, the first principle of sovereignty is to use it or lose it."¹³⁶ To that end, he has pledged and pushed for the construction of more ice-capable patrol vessels and improved infrastructure in the underdeveloped Arctic region of his country. He has broad support for his initiative among the Canadian public.

A January 2011 public opinion survey conducted by the University of Toronto Munk School of Global Affairs found that "Canadians, regardless of where they live, tend to see the Arctic as highly important and feel that it is deserving of a dominant place in [their] foreign policy...a clear majority of Canadians from all regions of the country want to increase Canada's military presence in the Arctic."¹³⁷ Having also

¹³⁵ Most notably was the Russian invasion of Georgia in 2008. In addition, the on-going dispute over fisheries and territory with Japan is germane, as well as Russia's use of "economic warfare" against Ukraine over disputes in the price of gas imports and Ukraine's potential membership in NATO.

¹³⁶ Bruce Champion-Smith, "Arctic Sovereignty 'First Priority' for North, Says Harper," *The Star*, August 23, 2010, <http://www.thestar.com/news/canada/arctic/article/851309--arctic-sovereignty-first-priority-for-north-says-harper>.

¹³⁷ Ekos Research Associates Inc., *Rethinking the Top of the World: Arctic Security Public Opinion Survey* (Toronto: University of Toronto, 2011), iv and 74. Available at: <http://munkschool.utoronto.ca/files/downloads/FINAL%20Survey%20Report.pdf>.

surveyed the publics of the other Arctic Council member nation states, the study additionally found that, surprisingly, “it is Canadian public opinion, rather than American, that is least open to negotiation and compromise [on Arctic issues]...When it comes to Northern sovereignty, Canadians seem to look more like the stereotypical American and Americans are cast in the more cooperative ‘Canadian’ approach.”¹³⁸

However, while Russia and the United States figured very low in the Canadian popularity contest, China ranked the lowest.¹³⁹ Is it not surprising, then, that when Prime Minister Harper was asked by a Chinese journalist to comment on the Canadian opinion that the Arctic is for Arctic powers only and what he thought about the role of outside interests in the region, he responded, quite frankly: “The government of Canada, working with our partners and the people in this region, intend to assert our sovereignty in these regions... In terms of what happens outside sovereign territories, Canada will work with the Arctic Council and other organizations to encourage co-operative activity, peaceful transit and peaceful development.”¹⁴⁰ In other words, other nations are welcome to visit, but they are not welcome to stay, and most certainly not without an invitation in either case.

While scholars like Michael Byers have proposed avenues of cooperation with Russia, Canadian political and military leaders continue to hold annual exercises designed specifically to counter any Russian gambits for Arctic hegemony. Operation NANOOK 11, a combined exercise with the United States and Denmark, employed 1,100 Canadian soldiers in a fictitious scenario “to defend Ottawa’s sovereignty in the Far North” and is regarded by analysts as a warning to Russia in its efforts to claim areas of the Arctic contested with both Canada and Denmark (i.e., the Lomonosov Ridge).¹⁴¹ Nevertheless, it should be noted that while Canada is highly protective of its sovereignty,

¹³⁸ Ibid., viii and 74.

¹³⁹ Ibid., ix.

¹⁴⁰ Gloria Galloway, “Harper Stands Firm on Sovereignty as China eyes Arctic Resources,” *The Globe and Mail*, August 26, 2011, <http://www.theglobeandmail.com/news/politics/ottawa-notebook/harper-stands-firm-on-sovereignty-as-china-eyes-arctic-resources/article616967/>.

¹⁴¹ Ludovic Hirzmann, “Le Canada bien décidé à ne pas perdre son Grand Nord,” *Le Figaro*, August 7, 2011, <http://www.lefigaro.fr/international/2011/08/07/01003-20110807ARTFIG00202-le-canada-bien-decide-a-ne-pas-perdre-son-grand-nord.php>.

there is little indication at this time in either public statements or strategic communications to indicate an intention to use these forces unless attacked. Perhaps the Canadians are satisfied that their actions speak for themselves and that their reasons and interests are clear.

3. Summary

Intent implies a purpose to one's actions or aspirations. To put it another way, actions and aspiration signal intent. In the case of Russian actions and rhetoric in the Arctic, one can deduce nothing but firm and committed intent on the part of its leadership to secure its claims. There have been scant, if any, peaceful actions undertaken by the Putin and Medvedev administrations to back up their peace-seeking rhetoric. Calls for diplomatic resolution of territorial disputes in the Arctic and for working "within existing international agreements and mechanisms" are only operationalized through agreements to cooperate on search and rescue efforts and (competitive) scientific exploration and research for submission to a forum that has no binding authority to settle such disputes. Meanwhile, ambitious militarization of the Arctic is clearly reinforced with explicit rhetoric proclaiming their intent to defend their national security interests. As noted previously, for Russia, the natural resources in the Arctic are a national security asset of strategic importance.

Canada, too, beats the drum of sovereign defense in the Arctic, though its rhetoric is significantly less militaristic than that of Russia. Actions, in this case, speak for themselves. The Canadians will build up forces in the region to the extent necessary to defend their sovereignty. If Prime Minister Harper had his way, this build-up would be happening more quickly than it has been. Indeed, financial constraints constitute the only reason that the four NATO countries in the Arctic have not been building up their Arctic capabilities more rapidly.

The bottom line is that the intent of the Arctic nations to defend their regional and broader security interests is real. The capabilities, while in some cases only planned or

very slowly coming into service, are materializing, and the economic opportunity has never been greater and will only increase in the future. The threat of a militarized conflict in the Arctic is therefore real as well.

E. CONCLUSION

Opportunity, capability, and perceived intent on their own do not cause conflict, but they do serve to increase anxiety about an apparent threat to one's interests. It is when these three factors combine that the potential for conflict emerges. All that remains for an otherwise benign event to quickly escalate into a militarized interstate dispute is a sufficient motive or misunderstanding. In the Arctic, such motives include Russia's critical reliance on hydrocarbon resources to maintain its political and economic stability, and therefore its national security. For the United States and its NATO allies, the need to maintain and credibly defend their sovereignty and their own economic interests provide ample incentive to act decisively, if necessary. When one's security is challenged or threatened by another power, the potential for militarized conflict can quickly become an actual conflict. Despite the sub-zero physical climate, the Arctic is a hotbed of competing interests.

At present, only Russia is capable of effectively defending its claims in the Arctic with its current military and law enforcement capabilities. Given Russia's economic dependence on hydrocarbon resources—which the Arctic promises to offer in abundance—Moscow's economic claims in excess of its recognized EEZ are likely to encroach on, or overlap with, the legitimate claims of neighbors. But it stands alone. Russia's overwhelming might in this domain will eventually make "right" in its favor if NATO is unable to deter assertive uses of force similar to those which the Russian Coast Guard continually subjects Japan near the Kuril Islands. Any loss in this regard would be much more damaging to NATO's deterrence credibility than its current inaction.

Unless Canada, Denmark, Norway and the United States can come together under the NATO banner and make the Arctic a centerpiece of the Alliance's collective defense agenda for the twenty-first century, they each risk standing alone in the Arctic as well, and with a significantly smaller troop-to-task capability than their geopolitical rival.

Simon Ollivant's 1984 warning of the dangers of internal dispute within the Alliance is perhaps even more salient today. Denmark and Canada have yet to officially resolve their dispute over Hans Island. Canada and the United States continue to argue over the legal status of the Northwest Passage and the Beaufort Sea. Either one of these disputes could undermine decades of Alliance cohesion.

According to the National Academies, "Projecting an active and influential presence in the polar regions requires that the United States [and by extension, NATO] be able to access polar sites at various times of the year, reliably and at will. It is the judgment of this committee that this need is only partially fulfilled by airborne, space-borne, and submarine assets and that a physical surface presence is necessitated by geopolitics."¹⁴² At present, the United States and NATO, writ large, are unable to provide this critical presence. Only Canada is taking the necessary steps to meet the future defense and law enforcement needs presented by an opening Arctic region, and then only as a unilateral measure and not as part of a concerted, comprehensive Alliance program. Perhaps a rising Canada will take a much-needed leadership role in the "True North" and provide the crucial motivation within NATO to spur its Arctic allies into action. Given Canada's present position on the subject, however, it is incumbent on the United States, in cooperation with Norway and Denmark, to promote a more robust "Arctic awareness in the alliance."¹⁴³

The prioritization fallacy of politicians assumes a model of fiscal discipline in which some aspects of national and collective defense are more important than others and thus deserve more immediate attention and funding. In today's globalized international system, economic warfare can be just as costly to a nation as conventional warfare. Indeed, one's enemies look to exploit gaps and other weaknesses in defensive strategies, rather than attack a "prioritized" strength head-on. The Arctic is NATO's Achilles heel. The threat presented by an opening Arctic should be taken more seriously by the Alliance's political leaders. At the same time, it may be NATO's salvation. The region

¹⁴² The National Academies, *Polar Icebreakers in a Changing World: An Assessment of U.S. Needs*, 98.

¹⁴³ Coffey, "NATO in the Arctic," 2.

presents the Alliance with its most credible mission since the end of the Cold War as a political-military organization—an opportunity to rejuvenate its collective defense doctrine in the face of a new arena of warfare. To protect itself, the Alliance must act now to enhance its (collective) military and (national) law enforcement presence in the region on the one hand, and close the gap legally and diplomatically by U.S. accession to the UNCLOS on the other. Only a comprehensive approach can ensure that the Alliance's shared security interests are well-defended in the international arena. An ounce of presence now would cost much less than a pound of cure later.

THIS PAGE INTENTIONALLY LEFT BLANK

III. MITIGATING FACTORS?

“The ambitions of the actors in the theatre may soon be at odds with the prevailing ‘Pax Arctica’ doctrine that claims, at least publicly, that the international rule of law, prudence and co-operation will govern the judgment and behaviour of all players for the foreseeable future.”

—Irvin Studin,
Fellow, Lee Kuan Yew School of Public Policy,
University of Singapore¹⁴⁴

Since World War II, the tenets of international institutionalism have taken root in the establishment of several interest-based multilateral organizations for collective security and dispute resolution. The enduring nature of these organizations and fora attests to their almost unanimous recognition by states and individuals alike as legitimate, useful, and most importantly efficient, at least in some circumstances, in achieving their founding goals – namely peaceful resolution or prevention of interstate disputes.

Recognition as legitimate organizations endows international institutions with an ability to speak on behalf of their constituencies and to act with the force of law, neutrality, or collective deterrence. A proven record of handling issues in accordance with their founding charters strengthens their position as credible and capable instruments of dialogue and mediation. This legitimacy, in turn, enables these fora to function as useful tools of arbitration or negotiation to obtain political objectives when bilateral talks have failed and reinforces their role as an intervening step in the escalation of a dispute. Indeed, many international institutions have established themselves as norms in international relations to such an extent that a failure to utilize them is regarded as significantly damaging to a state’s case for pursuing a given political objective. It can also result in a backlash of international condemnation or punitive sanction, making any victory obtained through aggression more politically pyrrhic than profitable. Finally, international institutions offer a less destructive means of dispute resolution than war, especially when such conflicts are multilateral in nature. By tackling such problems

¹⁴⁴ Irvin Studin, “The Melting of the Polar Ice Signals the End of ‘Pax Arctica,’” *Financial Times*, August 30, 2012, <http://www.ft.com/cms/s/0/01e312ce-f1f1-11e1-bba3-00144feabdc0.html#axzz28U0XxHn0>.

through organizations specifically designed to mitigate interstate and intraregional disputes, a certain weight of process, protocol, and time is brought to bear in negotiations, and one settlement may satisfy multiple parties, rather than attempting to negotiate several bilateral agreements.

The apparent success of international institutionalism has likewise led to the genesis of new theories in international relations such as the Democratic Peace Theory, and its economic corollary, the Capitalist Peace Theory.¹⁴⁵ The former theory indicates that established and developed democratic societies are highly unlikely to resort to armed conflict to resolve disputes between them. In this case, common interests, institutions, and methodologies serve as vectors for understanding and trust. The more interests, institutions, and methodologies are shared, the more likely it is that disputes will be resolved through mutually agreeable and peaceful mechanisms. In the case of the latter theory, the vectors connecting two nations are economic rather than political or social, and more robust interconnectedness creates an economic incentive not to disrupt a mutually beneficial source of wealth, stability, and power.

For these reasons, the appeal of international organizations and economic interdependence to mitigate the threat of militarized interstate disputes holds significant sway in the realm of international relations and in political and professional discussions of the matter. As briefly mentioned in the previous chapter, politicians, scholars, and journalists all tout international institutions as a necessary and critical component of conflict resolution. In both rhetoric and practice, states continue to use them as tools to pursue their political objectives. Precisely because international institutions are often perceived as legitimate, useful, and efficient in preventing conflict, they are also assumed to be effective at guaranteeing these same ends. When arbitration or economic ties are perceived to be biased or inconducive to one's vital interests, however, ideals hold little sway over pragmatic interests or calculated political realism. Thus, the mitigating effect of international institutions has the same limitations of opportunity, capability, and intent

¹⁴⁵ For more on the Democratic Peace Theory, see Bruce Russett, *Grasping the Democratic Peace: Principles for a Post-Cold War World* (Princeton: Princeton University Press, 1993), among his many other works on the issue. For more on the Capitalist Peace Theory, see Erik Gartzke, "The Capitalist Peace," *American Journal of Political Science* 51, no. 1 (January 2007): 166–191.

based on a state's perception of the capacity of such fora to meet its interests. The purpose of this chapter is to highlight both the potential and the limitations of international institutions as mitigating factors against conflict in interstate disputes in the Arctic.

This chapter begins with an overview of the key fora for dispute mitigation in the Arctic, followed by an assessment of the Capitalist Peace Theory as an alternative means of mitigating disputes. The findings of this chapter lead to the conclusion that while international institutions and economic interdependence are useful, they are not a panacea for conflict, especially where national security interests are concerned.

A. CONFLICT RESOLUTION MECHANISMS AND FORA

Until the Arctic ice cap began receding to a considerable extent in the early 2000s, the region was largely regarded as a barren expanse of little political value, and certainly no economic value. The territorial disputes mentioned in Chapter II were largely suppressed by an overriding need for solidarity within the North Atlantic Treaty Organization (NATO) against the aims of the Soviet Union. The limited geostrategic value assigned to the Arctic during the Cold War lie solely within the military domain, and even then it was more narrowly confined to conflict involving nuclear arms. As such, the consultative bodies established by the Strategic Arms Limitation Talks (SALT) treaties and the first Strategic Arms Reduction Treaty (START) sufficed as appropriate fora for resolving "Arctic" disputes.

As discussed in the previous chapter, in the last decade increased economic opportunities have likewise increased the geostrategic value of the region. Additional military capabilities are coming online to defend the competing interests of the Arctic nations, and political intent to ensure national security throughout the northern cryosphere increases the potential for an armed altercation. In an attempt to mitigate this potential, regional governments are seeking venues of arbitration and cooperation in order to achieve their political goals peacefully. Three fora in particular present the Arctic powers with legitimate mechanisms to resolve their territorial disputes and reduce the

likelihood of conflict: (1) the United Nations Convention on the Law of the Sea (UNCLOS); (2) the NATO-Russia Council; and (3) the Arctic Council. Each is discussed in turn below.

1. The UNCLOS

In the twenty-first century, the “Law of the Sea” is by and large understood and obeyed with uniform recognition of rights and responsibilities, but such “customary law” had not always been so stable or comprehensive. The terms, limits, rights, and roles of maritime nations had been continually evolving over centuries. Disputes over territory had to be resolved on a case-by-case basis and claims usually had to be enforced by armed presence to gain legitimacy. It was not until the mid-twentieth century that sufficient impetus manifested to consolidate and codify these rules of the road into binding international maritime law.

a. Background

On September 28, 1945, President Harry Truman of the United States unilaterally issued Proclamation 2667, setting forth the “Policy of the United States with Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf.” The consequences of this proclamation fundamentally changed the definition of territorial waters and jurisdiction over maritime resources in international law. Until this point, customary international law recognized the territorial waters of any state only out to a distance of three nautical miles (or one league). The eighteenth century Dutch jurist Cornelius van Bynkershoek justified this distance on pragmatic grounds insofar as this was the maximum range that a coastal cannon could reach and thereby establish effective control over a state’s contiguous seas – the so-called “cannon shot rule.”¹⁴⁶

On the grounds that “recognized jurisdiction over these resources [new sources of petroleum and other minerals in the continental shelf of the United States] is required in the interest of their conservation and prudent utilization when and as

¹⁴⁶ Cornelius van Bynkershoek, *De Dominio Maris Dissertatio*, trans. Ralph van Deman Magoffin (New York: Oxford University Press, 1923), 44.

development is undertaken,”¹⁴⁷ the Truman Proclamation extended America’s exclusive jurisdiction over these resources far beyond the traditional three nautical mile limit. At the same time, however, the proclamation explicitly noted that

In cases where the continental shelf extends to the shores of another State, or is shared with an adjacent State, the boundary shall be determined by the United States and the State concerned in accordance with equitable principles. The character as high seas of the waters above the continental shelf and the right to their free and unimpeded navigation are in no way thus affected.¹⁴⁸

For a blue water naval power and a global economic power, recognition of the freedom of navigation was paramount. This Proclamation at once unilaterally and arbitrarily extended jurisdiction over an increased area of potential resources (to the outer limits of a state’s continental shelf) while maintaining the neutrality of the international legal status of the water above it. In effect, the United States proclaimed that it would have its cake and eat it, too, by claiming both the mineral rights under the sea and the freedom to travel anywhere within and over it (beyond recognized territorial waters). Soon, maritime powers across the globe began to claim their own exclusive economic zones or to arbitrarily invoke sovereign rights over extended territorial waters, in some cases, like Peru, out to 200 nautical miles. Disputes immediately arose, but short of armed presence, there was no means to secure these claims with international recognition.

From 1956 to 1958, the United Nations held its first Convention on the Law of the Sea in Geneva, Switzerland. At this first Convention (generally referred to as “UNCLOS I”), delegates negotiated and adopted into international law several conventions defining the “Territorial Sea and Contiguous Zone,” the “Continental Shelf,” and the “High Seas,” as well as an internationally recognized regulatory regime regarding “Fishing and Conservation of Living Resources of the High Seas.” The United States and other Convention parties quickly recognized, however, that “the rapidly proliferating number of expansive claims [over territorial waters and EEZs]...would restrict

¹⁴⁷ Harry S. Truman, Proclamation 2667, “Policy of the United States with Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf,” 10 Fed. Reg. 12,305 (September 28, 1945): 67.

¹⁴⁸ Ibid.

fundamental freedom of navigation rights,” and that economic interests in maritime resources demanded “legal certainty” governing offshore exploration and resource exploitation.¹⁴⁹ A second Convention (“UNCLOS II”) was convened in 1960, but several of the disputes that had emerged from the UNCLOS I definitions remained unresolved.¹⁵⁰ The third United Nations Convention on the Law of the Sea (“UNCLOS III,” hereafter referred to as simply “the UNCLOS” unless otherwise distinguished by specific iteration), which convened from 1973 through 1982, codified existing practices of customary maritime law, established categorical limits to the UNCLOS I definitions, and created protocols for the resolution of disputed claims.

b. Peaceful Dispute Resolution Mechanisms

In addition to delineating definitions and rights, the UNCLOS also sets forth protocol and procedures for states with maritime disputes to delimit their respective maritime boundaries *vis-à-vis* neighboring countries with opposite or adjacent coasts or to challenge the “interpretation and application of [the] Convention” in general. Part XV, Section 1, Article 279 of the UNCLOS specifically enjoins Parties to the Convention to “settle any dispute between them...by peaceful means,” while Article 280 encourages members to work out agreements between themselves. In the event that a separate bilateral, multilateral, or general agreement cannot be reached, Part XV provides for several dispute resolution mechanisms including conciliation (“peer-mediation” of the dispute conducted in accordance with the procedures established in Annex V of the UNCLOS) or mutually agreeable submission to one of four recognized bodies of arbitration, the final judgments of which are all binding. These bodies include the International Tribunal for the Law of the Sea (Annex VI), the International Court of

¹⁴⁹ Senate Committee on Foreign Relations, Convention on the Law of the Sea, S. Exec. Rept. 110–9, at 2 (2007).

¹⁵⁰ A primary example is noted with regard to “territorial waters.” While UNCLOS I established a definition of territorial waters and the sovereign rights of the coastal State therein, it did not provide for a delimitation of these waters. Therefore, while some states claimed territorial waters out to the traditionally accepted limit of three nautical miles, most others began to claim limits out to 12 nautical miles, while still others claimed sovereign jurisdiction out to 200 nautical miles. The number of ensuing territorial disputes between nations with opposite or adjacent coasts can be imagined. UNCLOS I had no mechanism or accepted convention by which to settle these disputes peacefully, and no progress was made in this regard during UNCLOS II.

Justice, general arbitration (Annex VII), or special arbitration (Annex VIII) when the dispute involves fisheries, protection and preservation of the maritime environment, scientific research, or navigation, including pollution by vessels and by dumping. States may declare upon accession to the Convention which of these options they accept for the mediation of any future disputes or will otherwise be subject to general arbitration (Annex VII).

c. Limitations of the UNCLOS

While signatories to the Convention are pressed to resolve their disputes peacefully, a few key factors inherent within the Convention itself inhibit such an ideal solution for the Arctic states. Firstly, the dispute resolution mechanisms of the UNCLOS are only available to parties to the Convention, and the United States remains outside the regime. It can neither submit its claims to the Commission on the Limits of the Continental Shelf (CLCS) for adjudication nor appeal for arbitration in order to settle its outstanding maritime boundary dispute with Russia.

Secondly, as mentioned previously, Article 4 of the Convention asserts a ten-year limit for Parties to submit “excessive” continental shelf claims to the CLCS for adjudication. Adjudication, however, only provides an internationally recognized delineation of the claim and not a final delimitation where such a claim may be disputed by a state with an opposite or adjacent coast. Such disputes must be settled by mutual agreement of the contesting parties, or submitted to one of the aforementioned bodies for a binding resolution.

In the case of Russia in particular, upon acceding to the UNCLOS in 1997 and in accordance with Article 298 therein, it declared that it

does not accept the procedures, provided for in Section 2 of Part XV of the Convention, entailing binding decisions with respect to disputes concerning the interpretation or application of articles 15, 74 and 83 of the Convention, relating to sea boundary delimitations, or those involving historic bays or titles; disputes concerning military activities, including military activities by government vessels and aircraft, and disputes concerning law-enforcement activities in regard to the exercise of sovereign rights or jurisdiction; and disputes in respect of which the

Security Council of the United Nations is exercising the functions assigned to it by the Charter of the United Nations.¹⁵¹

In effect, Moscow declared that it would accept delimitation of disputed boundaries only on a bilateral basis, negotiated outside the UNCLOS regime. Russia's pending resubmission¹⁵² to the CLCS of its excessive continental shelf claims has been interpreted as merely a diplomatic maneuver of convenience to gain recognition for its claims and not an earnest effort to use the UNCLOS as a peaceful dispute resolution mechanism.

2. NATO-Russia Council

The second significant organization germane to relations among the Arctic nations is the NATO-Russia Council (NRC).

a. Background

The 1997 Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation set forth the cooperative framework within which the NATO Allies and Russia agreed to cooperate to maintain peace and stability within an undivided Europe. The subsequent 2002 Rome Declaration entitled "NATO-Russia Relations: a New Quality" established the NRC as the successor to the Permanent Joint Council. The NRC is supposed to mitigate conflict between the NATO member states and the Russian Federation through open, transparent, and reciprocal dialogue and cooperative engagement on issues of mutual interest. According to the Founding Act, "NATO and Russia do not consider each other as adversaries. They share the goal of

¹⁵¹ United Nations, "Declarations and Statements under Articles 287, 298 and 310 of the United Nations Convention on the Law of the Seas," http://www.un.org/Depts/los/convention_agreements/convention_declarations.htm.

¹⁵² Russia first submitted its claims in December 2001. The Commission requested further and more detailed evidence to support this claim before it would provide a final decision. In July 2011, Russian Deputy Prime Minister Sergei Ivanov announced that his country intended to submit its new findings to the CLCS the following year.

overcoming the vestiges of earlier confrontation and competition and of strengthening mutual trust and cooperation.”¹⁵³

b. Peaceful Dispute Resolution Mechanisms

To that end, the NRC meets regularly to discuss issues of mutual interest relating to “terrorism, proliferation, peacekeeping, theatre missile defense, airspace management, civil emergencies, defense reform, logistics, and scientific cooperation focused on new threats and challenges.”¹⁵⁴ The Arctic would certainly constitute a new challenge of mutual interest in NATO-Russia relations. According to Marten Lindberg, a contributing writer for the International Relations and Security Network (ISN) of the Zurich-based Center for Security Studies (ETH), since Russia planted a flag on the seabed under the North Pole in 2007, “Arctic policy has been a standard topic of discussion in the ‘NATO-Russia Council’...In the latest meeting in April [2012], both sides agreed that whatever security challenges they meet over the Arctic are best addressed jointly.”¹⁵⁵

Lindberg holds that disunity within the Alliance over Arctic policy prevents the issue from becoming militarized in a NATO-Russia context:

For all of NATO’s attempts to coordinate military capabilities, there is no consensus on how these forces should be deployed. Canada famously vetoed the Alliance’s first attempt (in 2009) to enact an Arctic policy and was likely to be behind the decision to make no mention of the Arctic at the recent Chicago summit. By contrast, Norway is a keen advocate of NATO consolidating its influence in the high north. Indeed, the United States, Denmark, and presumably the three remaining Scandinavian states, also support increased NATO engagement, providing this is limited to responding to natural disasters.¹⁵⁶

¹⁵³ NATO-Russia Council, “Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation signed in Paris, France,” May 27, 1997, <http://www.nato-russia-council.info/en/official-documents/official-document-03/>.

¹⁵⁴ North Atlantic Treaty Organization, “NATO-Russia Council,” October 27, 2010, http://www.nato.int/cps/en/natolive/topics_50091.htm.

¹⁵⁵ Marten Lindberg, “Is NATO taking over the Arctic?” *ISN Blog*, August 22, 2012, <http://isnblog.ethz.ch/international-relations/is-nato-taking-over-the-arctic>.

¹⁵⁶ *Ibid.*

Disunity within NATO, however, only serves to complicate security issues in the Arctic and ultimately undermines the efficacy of NATO-Russia consultations within the framework of the NRC as a conflict resolution mechanism.

c. Limitations of the NRC

Canada's noted objections to including Arctic security in NATO's 2010 Strategic Concept or the 2012 Chicago NATO summit declaration mean that any such discussion within NATO channels does not represent the position of the Alliance as a whole. This can only serve to create a sense of growing insecurity on the part of smaller Arctic states such as Norway and Denmark with inadequate indigenous capacity to secure their national economic and security interests in the region outside of a NATO banner. Meanwhile, with the NRC focus on conventional arms limitations aimed solely at land forces and aircraft over the continental European landmass as provided for in the Treaty on Conventional Armed Forces in Europe (CFE), little official attention is given to the naval arms race occurring in the water just to the north of the same area.

Secondly, it should be noted that while public statements regarding cooperation between the Alliance and Russia continue to offer the appearance of smooth relations between the two parties, the reality of NATO-Russia relations has been less than harmonious. As noted on the NATO website, "Following Russia's disproportionate military action in Georgia in early August 2008, the Alliance suspended formal meetings of the NRC and cooperation in some areas, while it considered the implications of Russia's actions for the NATO-Russia relationship."¹⁵⁷ From the Russian perspective, NATO's statement in 2008 that Georgia and Ukraine (both former Soviet republics) would eventually join the Alliance was perceived as an unacceptable encroachment into

¹⁵⁷ North Atlantic Treaty Organization, "NATO-Russia Council."

Russia's "traditional" sphere of influence and an illustration of NATO's disregard for Russian security interests in the region.¹⁵⁸

By the time of the NATO Lisbon Summit in 2010, relations seemed to have improved to a considerable extent, with leaders on both sides claiming to have overcome historical differences and to have embraced a willingness to cooperate.¹⁵⁹ "Since Lisbon, however," notes Monaghan,

discordant notes have sounded louder, particularly in announcements by senior Russian officials. This is in large part due to ongoing differences in defining [the] partnership, not just in terms of the agenda, but also approach. Although there may be a common agenda, it is not yet 'mutual' in terms of defining priorities, nor is it 'joint' in terms of how cooperation is planned or enacted.¹⁶⁰

Monaghan also points out that "hopes for greater cooperation from Moscow appear to be optimistic, since Moscow will seek to defend what it sees as Russia's interests above simple partnership."¹⁶¹

Indeed, Russia's "disproportionate military actions" in Georgia in 2008, as well as its economic warfare tactics *vis-à-vis* Ukraine in 2006, 2008 and 2009 showed that the NRC had no teeth to compel adherence to its founding principles or to ensure implementation of its crisis management functions. With no ability to veto or punish the actions of any of its members or to mandate consultations before making decisions or

¹⁵⁸ According to NATO's Bucharest Summit Declaration in April 2008, "NATO welcomes Ukraine's and Georgia's Euro-Atlantic aspirations for membership in NATO. We agreed today that these countries will become members of NATO. Both nations have made valuable contributions to Alliance operations. We welcome the democratic reforms in Ukraine and Georgia and look forward to free and fair parliamentary elections in Georgia in May. MAP [Membership Action Plan] is the next step for Ukraine and Georgia on their direct way to membership. Today we make clear that we support these countries' applications for MAP. Therefore, we will now begin a period of intensive engagement with both at a high political level to address the questions still outstanding pertaining to their MAP applications."

(NATO, "Bucharest Summit Declaration," April 3, 2008, http://www.nato.int/cps/en/natolive/official_texts_8443.htm, para. 23).

¹⁵⁹ Andrew Monaghan, "From Lisbon to Munich: Russian Views of NATO-Russia Relations," NATO Defense College Research Report (February 2011), <http://www.ndc.nato.int/download/downloads.php?icode=238>, 1.

¹⁶⁰ Ibid., 2.

¹⁶¹ Ibid., 1.

taking action, the NRC is useless as a dispute resolution mechanism, especially where national security interests are concerned.

3. The Arctic Council

The third significant international institution mentioned in literature advocating the likelihood of peaceful cooperation in the Arctic is the Arctic Council—an organization consisting of high-level government representatives from each of the eight countries with territory within the Arctic Circle, including Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States. It was established in 1996 by the Ottawa Declaration to “provide a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of indigenous and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic. The scientific work of the Arctic Council is carried out in six expert working groups.”¹⁶²

As the primary focus of the Arctic Council is the preservation of the Arctic environment, it is significant that the Arctic Council also provides for permanent representation by six recognized tribal confederations with “full consultation rights in connection with the Council’s negotiations and decisions.”¹⁶³ This unique feature of the organization strengthens the voice of those subnational entities most directly affected by developments in the region and provides a strong civilian-focused orientation to Arctic Council policies and programs.

a. Background

Soviet President Mikhail Gorbachev’s reform policy of *glasnost*’ paved the way for a thawing in Arctic relations previously frozen and paralyzed by a militarization of the region during the Cold War. By 1989, relations had improved to such

¹⁶² Arctic Council, “Ottawa Declaration,” September 19, 1996, <http://www.arctic-council.org/index.php/en/about/documents/file/13-ottawa-declaration>, 1.

¹⁶³ Arctic Portal, “About the Arctic Council,” <http://www.arcticportal.org/arctic-council>.

an extent that all eight Arctic states agreed to meet in Rovaniemi, Finland, to discuss an issue of common concern: the fragility of the Arctic environment and its importance to their respective peoples.

In 1991, the nations agreed to cooperate on a joint Arctic Environmental Protection Strategy (AEPS) which “concentrated on cooperation in scientific research and sharing of data on effects of pollution as well as assessing the potential environmental impacts of development activities in the Arctic.”¹⁶⁴ The rapidly changing environmental dynamics in the region, coupled with a monumental restructuring in international relations, meant a more robust organizational charter would be needed to tackle these problems. In 1996, the Ottawa Declaration established the Arctic Council to replace the AEPS as the formal deliberative and coordinating body for issues of Arctic development, environmental protection, and safety involving the eight Arctic states and the six indigenous confederations.

b. Peaceful Dispute Resolution Mechanisms

The Arctic Council operates through six working groups which serve to coordinate policy regarding Arctic contaminants; monitoring and assessment programs; conservation; emergency prevention, preparedness and response; environmental protection; and sustainable development. In 2011, the Council approved its first legally-binding resolution regarding Aeronautical and Maritime Search and Rescue (SAR).¹⁶⁵ In the realm of SAR and environmental protection, there is little disagreement among member states and permanent participants. Thus, while the agreement marks a significant achievement in reinforcing the legitimacy, usefulness, and efficiency of the organization, for the purposes of the present argument, it is likely that the future activities and output of the Sustainable Development Working Group (SDWG) will be more germane to conflict in the Arctic. Since 1998, the SDWG has issued several reports regarding the impact of climate change and energy development in the Arctic, but it has yet to coordinate a comprehensive binding strategy and policy among its members on the issue.

¹⁶⁴ Ibid.

¹⁶⁵ Arctic Council, “History,” <http://www.arctic-council.org/index.php/en/about-us/history>.

Perhaps in part this is due to the undermining influence of the 2008 Ilulissat Declaration made by the five “circumpolar” Arctic states of Canada, Denmark, Norway, Russia, and the United States (with the contentious exclusion of the remaining members of the Arctic Council) wherein they agreed that the UNCLOS “provides a solid foundation for responsible management by the five coastal States...[and that they] therefore see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean.”¹⁶⁶

c. Limitations of the Arctic Council

It must be noted that the Ottawa Declaration itself makes a point of explicitly qualifying and limiting the scope of “Arctic issues” which the Council is meant to address when it footnotes the term, stating that “The Arctic Council should not deal with matters related to military security.” It is indeed telling that Thomas Winkler, the head of the Danish government’s International Law Department in Copenhagen, stated that the “meeting in Ilulissat is not a competition to the Arctic Council. The issues that we’re going to discuss will be issues that is [sic] the responsibility of the five coastal states of the Arctic Ocean.”¹⁶⁷ Clearly the “circumpolar” Arctic states regard the Arctic Council as an insufficient, ineffective, and inappropriate organization for the resolution of national security-related disputes.

The Arctic Portal¹⁶⁸ points out these deficiencies in this area when it notes,

The fact is...that there is lacking a common political agenda for the future in the Arctic and a legal framework for the emerging maritime

¹⁶⁶ “The Ilulissat Declaration,” May 28, 2008, http://www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf.

¹⁶⁷ CBC News, “Denmark Defends List of Nations for Arctic Meeting,” May 20, 2008, <http://www.cbc.ca/news/canada/north/story/2008/05/20/arctic-meeting.html>.

¹⁶⁸ According to the Arctic Portal website, the Arctic Portal is an endorsed IPY-Project (nr. 388) led by Iceland’s Senior Arctic Official in consultation and co-operation with other members of the Arctic Council and its Working Groups, Permanent Participants, Northern Forum, University of the Arctic, the Arctic Centre at the University of Lapland, the Arctic and Antarctic Research Institute of Roshydromet, the International Centre for Reindeer Husbandry and others. It is mainly focused on the needs of the Arctic Council and its working groups, providing relevant Arctic institutions with an integrated document library and an integrated project directory, advanced search, interactive mapping, homepages for AC projects, etc.

activities...Most of these activities must be undertaken jointly by all the Arctic nations for them to have real impact. The shortage of the Arctic Council mandate to deal with issues other than [the] environment has led to a situation where decisions are made in isolation creating thus [an] incomplete and fragmented framework for the Arctic region.¹⁶⁹

Unless and until the members and permanent participants of the Arctic Council agree to expand the scope of regional cooperation through this forum, this institution will never serve as a credible and effective dispute resolution mechanism. Given the 2008 statement by the five Arctic powers in Ilulissat and the high state of flux in Arctic energy and security spheres, it is unlikely that the Arctic Council will be authorized to assume such a role anytime soon.

4. Summary

International institutions are assuming a greater role in Arctic affairs, each offering dispute resolution mechanisms covering various issues of concern to regional states and their peoples. The UNCLOS provides channels for arbitration over territorial disputes arising from competing claims to economic resources. The NATO-Russia Council has professed an interest in maintaining military stability and security in its area of responsibility by serving as a vehicle for crisis management, trust-building cooperative measures, and open dialogue between former political-military rivals. The Arctic Council, meanwhile, focuses primarily on creating a regime for the protection of the environment, maritime safety, and responsible development of the region.

Contrary to the optimistic notion that these institutions are not only legitimate and useful, but also effective, this study has highlighted several critical limitations of these fora when it comes to their ability to actually resolve the disputes they are supposed to address. Parties to the UNCLOS, for example, are able to declare that they do not recognize the authority of its courts of arbitration to settle territorial disputes, and parties outside the Convention have no access to these arbitration panels. Within the NRC, the Arctic remains an officially unaddressed issue, and the focus of its cooperative or mediation activities remains conventional land and air forces operating on or over the

¹⁶⁹ Arctic Portal, "About the Arctic Council," <http://www.arcticportal.org/arctic-council>.

European landmass. Moreover, “frozen” conflicts in the Euro-Atlantic region, notably with regard to Georgia, have undermined relations between member states as well as the legitimacy of the NRC when it is not used for the purposes for which it was established—specifically conflict avoidance, transparent dialogue, and cooperative solutions to common problems. Finally, the scope of the Arctic Council’s mandate is extremely limited and specifically does not address military security issues. The institution has been further marginalized, even among its own members, when they have chosen to pursue economic development and territorial dispute mediation outside the framework of the Council.

Thus, far from being the panacea to maritime conflict in the Arctic, the relevant international institutions amount to little more than fora of convenience for the advancement of national political objectives and interests to the maximum extent possible. When conflicts arise between competing interests and national security is at stake, these institutions offer insufficient restraint or incentive to be taken seriously or utilized at all for the purpose of mitigating a militarized escalation of the dispute.

The remaining hope of Arctic peace theorists remains the ability of economic interdependence to dampen urges and incentives to resort to force to achieve national political objectives.

B. ECONOMIC INTERDEPENDENCE

Economic interdependence is the fundamental feature underlying a theory of a “capitalist peace” whereby the more robust the trade linkages between two countries are, the less incentive they will have to settle disputes through militarized means. This is because in attacking or threatening a trading partner, they risk destroying the trade relationships and economic engines supplying either country with its current source of wealth and therefore power (be it political, military, or economic) and thereby destroying or weakening their own ability to pursue their objectives or destroying or weakening the objective itself, making the venture moot. According to Erik Gartzke, “states with similar interests, or integrated markets, or mutual development and an absence of policy

differences are less likely to fight.”¹⁷⁰ In the case of Russia and the United States, none of these factors obtains decisively. It is unlikely that the economic interests of Russia and the United States will dovetail to a sufficient extent to encourage a capitalist peace, and integrated markets require robust and diversified economies on both sides of the trade balance. As it currently stands, Russia is essentially a petrostate—an exporter of energy resources and other raw materials with little additional value added. If economic interdependence is to mitigate the threat of militarized conflict over resource disputes, the only avenue left is through mutual development despite policy differences.

Stephen G. Brooks argues that a developing nation’s need for Foreign Direct Investment (FDI) can serve as a vector for economic interdependence and reduce the chances of militarized conflict because aggressive and erratic policies deter potential investment and undermine a country’s ability to develop.¹⁷¹ In the previous chapter, Russia’s critical reliance on hydrocarbon export rents for economic growth and regime sustainment was reviewed. Chad Pate furthers this argument by pointing out how Russia’s decaying Soviet infrastructure, lack of indigenous expertise and technology, and the extremely high cost of exploiting hydrocarbon deposits in the harsh Arctic environment all work against the country in its efforts to independently maintain or develop its export capacity and therefore its revenue.¹⁷² To that end, Pate argues that, “were Russia to initiate a conflict, it would likely harm any prospect that state may have for outside assistance in [meeting] its need for hydrocarbon production.”¹⁷³

An additional factor to consider in establishing effective economic interdependence is the buyer-seller dynamic. In a capitalist system, conflict anywhere along a trade route often increases transaction costs as the uncertainty and risk of disruption in the provision of goods and services intensify. While this may provide increased revenue to the seller in the short-term, it may also cause the buyer to seek more

¹⁷⁰ Erik Gartzke, “The Capitalist Peace,” 178.

¹⁷¹ Stephen G. Brooks, *Producing Security: Multinational Corporations, Globalization, and the Changing Calculus of Conflict* (Princeton: Princeton University Press, 2007), 10.

¹⁷² Chad P. Pate, “Easing the Arctic Tension: An Economic Solution” (Master’s thesis, Naval Postgraduate School, December 2010), 37–52.

¹⁷³ *Ibid.*, 11.

stable alternative sources and markets in the long-term, undercutting the seller's future gains. This dynamic is especially salient in the European-Russian energy relationship. Russia's reliance on hydrocarbon exports for revenue and Europe's dependence on hydrocarbon imports to fuel its own economy provide for a mutually beneficial partnership when the trade is balanced.

Given the relatively high price of oil and gas since Russian President Vladimir Putin first took office in 2000, the country has had sufficient capital to invest in modernizing its hydrocarbon extraction and transportation infrastructure. Despite the financial ability and the practical necessity, significant efforts to modernize this infrastructure remain in the talking stage at the moment.¹⁷⁴ What Russia continues to lack is the requisite expertise and technology to explore and develop known and potential reserves in the Arctic region. This is particularly so due to concerns that extraction from existing mature fields elsewhere in Russia could fall 20 per cent by 2020.¹⁷⁵ To that end, the country has periodically opened up its lucrative energy sector to foreign investors with the expectation of gaining both experience and technology in exchange for access to, and a reasonable percentage of the profits from the sale of, Russia's seemingly endless supply of gas and oil.

1. Potential for a Capitalist Peace?

In 2010, Russia and Norway concluded a treaty delimiting the disputed maritime boundary between the two nations that had lasted for four decades and prevented the exploitation of one of the Arctic's known and most valuable deposits of natural gas—the Shtokman Field. The agreement entailed a roughly equal division of the disputed areas and a further agreement to jointly develop any deposits straddling the new boundary.¹⁷⁶ Unfortunately, after three years of negotiations between Russian, Norwegian, and French

¹⁷⁴ Sebastião Martins, "Russia Ramps Up Modernisation of Oil-Refining Sector," Oil & Gas Technology, August 10, 2012, <http://www.oilandgastechnology.net/business-strategy/russia-ramps-modernisation-oil-refining-sector>.

¹⁷⁵ Ibid.

¹⁷⁶ Nazrin Mehdiyeva, "The Three Ds: Development, Diversion, and Diversification – Reviewing Russia's Energy Strategy to 2030," NATO Defense College Research Review (November 2011), <http://www.ndc.nato.int/download/downloads.php?icode=309>, 12.

stakeholders, the Norwegian firm Statoil decided to write off \$336 million which it had already invested in the joint venture with Gazprom, conceded its 24 percent stake to the Russian company, and walked away from the deal when the deadline to reach an agreement had elapsed.¹⁷⁷ The reason was twofold—neither good for future Russian FDI prospects. First, the “rising costs and falling prices made its development no longer feasible...[T]he 2008 financial crisis combined with an influx of new LNG [Liquefied Natural Gas suppliers] and a boom in shale gas production in the U.S. to slash demand for gas in Europe, Gazprom’s main market.”¹⁷⁸ Secondly, according to Vladimir Milov, a former Russian deputy energy minister, “Gazprom wanted to control completely all decision-making and saw the partners as playing a secondary role that just brought in money and technology. It is clear that this scheme did not suit the foreigners.”¹⁷⁹

Elsewhere, in late 2011, ExxonMobil concluded a joint deal with the Russian government-owned oil company Rosneft wherein the American company obtained a 33.3 percent stake in the development of potential deposits in the Kara Sea in exchange for partial Rosneft ownership of ExxonMobil assets in Texas and the Gulf of Mexico.¹⁸⁰ In addition, Rosneft and ExxonMobil will establish a joint Arctic Research and Design Center for Offshore Development (ARC) in St. Petersburg to develop state-of-the-art technology to drill in the extreme Arctic conditions with adequate environmental safety precautions, and they will also commence an exchange program for managerial and technical engineers to gain practical experience in deep sea drilling in ExxonMobil locations around the world.¹⁸¹ According to ExxonMobil Chairman and CEO, Rex Tillerson, “This agreement takes our relationship to a new level and will create

¹⁷⁷ Guy Chazan and Catherine Belton, “Gazprom Freezes Arctic Project over Costs,” *Financial Times*, August 29, 2012, <http://www.ft.com/cms/s/0/ab331568-f1d8-11e1-bba3-00144feabdc0.html#axzz25TbNBGVU>.

¹⁷⁸ Catherine Belton and Guy Chazan, “Shtokman Exit Shows a Realistic Gazprom,” *Financial Times*, August 29, 2012, <http://www.ft.com/intl/cms/s/0/b6c8cf9c-f1f8-11e1-bba3-00144feabdc0.html#axzz25nmXEUuZ>.

¹⁷⁹ Vladimir Milov, quoted in *ibid*.

¹⁸⁰ Tom Whipple, “Peak Oil Review – September 5,” *Energy Bulletin*, ASPO-USA, September 5, 2011, <http://www.energybulletin.net/print/58771>. Also, Rosneft, “Rosneft and ExxonMobil to Join Forces in the Arctic and Black Sea Offshore, Enhance Co-operation through Technology Sharing and Joint International Projects,” August 30, 2011, <http://www.rosneft.com/news/pressrelease/30082011.html>.

¹⁸¹ Rosneft, “Rosneft and ExxonMobil to Join Forces in the Arctic.”

substantial value for both companies. The agreement will be a basis for constructive dialog with the Government of the Russian Federation on establishment of a fiscal regime for offshore operation consistent with best global practices.”¹⁸² It remains to be seen how long this new strategic cooperation partnership will last. As Thomas Whipple of the Association for the Study of Peak-Oil and Gas-USA notes, “Moscow’s policies towards foreign oil companies operating in their country are mercurial at best.”¹⁸³

2. Past Precedent as a Deterrence for FDI and Interdependence

In 1994, then-Russian President Boris Yeltsin gave his approval for a joint venture to establish an LNG plant on Sakhalin Island—the country’s first, and a major component of its energy strategy. By 2006, Royal Dutch Shell had acquired a 62.5 percent stake in the venture and spent over \$20 billion in constructing and rerouting pipelines to comply with ever-changing Russian environmental and political requirements.¹⁸⁴ After several increases in the cost estimate for the project and a failure of the Russians to gain a significant or controlling stake, the Russian government, notorious for its lack of environmental concern,¹⁸⁵ took a cue from charges by a “non-governmental” watchdog called Rosprirodnadzor and shut down further production (now that the project was 75 to 80% complete) for violations of the Russian criminal code in a

¹⁸² Rex Tillerson, quoted in *ibid.*

¹⁸³ Whipple, “Peak Oil Review.”

¹⁸⁴ Cindy Hurst, “Investment Risky in Russia as Politics Affects Profits,” *Oil and Gas Journal* 105, no. 27 (July 2007): 20.

¹⁸⁵ According to the 2012 Environmental Performance Index managed by Yale and Colombia Universities, “Russia’s bleak environmental record has pushed it to the bottom of a new global ranking of how countries have been tackling pollution and managing their natural resources in the first decade of the century. A ‘severe breakdown’ in environmental public health in Russia between 2000 and 2010, as well as a worsening performance on overfishing and forest losses, means it has shown the least improvement of 132 countries studied” (Pilita Clark and Gillian Tett, “Russia Found Failing on Pollution Curbs,” *Financial Times*, January 23, 2012, <http://www.ft.com/intl/cms/s/0/f7585e52-45e5-11e1-acc9-00144feabdc0.html#axzz25nmXEUuZ>).

With regard to Russia’s petrochemical industrial pollution, and Sakhalin island in particular, the Blacksmith Institute states that “Northern Sakhalin has several onshore oil and gas fields developed by the Russian company Rosneft-Sakhalinmorneftegaz (SMNG) since the 1920’s. Oil leaks/spills are common here due to the obsolete equipment, primitive drilling technologies and corroded oil pipelines. Two of the oldest oil fields are Katangly and Okhinskiy that still operates as it did about 75 years ago. These onshore Soviet-era oil companies cause massive pollution and environmental damage” (Blacksmith Institute, “North Sakhalin,” <http://www.blacksmithinstitute.org/projects/display/74>).

campaign designed “to force the international oil companies (IOCs) to revise the terms of their investments to allow greater Russian participation in their projects.”¹⁸⁶ In December 2006, Shell finally succumbed to Russian political pressure and gave Gazprom a controlling stake in the joint venture; suddenly all the environmental and criminal charges disappeared.¹⁸⁷ With this success under his belt, President Putin went after other foreign-majority ventures operating in Russia in an attempt to amalgamate Russia’s strategic resources under state control.

TNK-BP, a joint venture by British Petroleum and the Russian firm Tyumen Neftegaz Company, secured a license from the Russian government in 1997 to develop the Kovykta gas field in eastern Siberia and produce nine billion cubic meters of gas per year by 2006.¹⁸⁸ In June 2007, President Putin had reportedly “run out of patience” with TNK-BP’s underperformance. According to Reuters, “State pressure on Kovykta has been repeatedly interpreted as a move to force the Russian partners to sell out so that Gazprom, or state-controlled oil major Rosneft, becomes a partner of BP... Putin declined direct comment on this issue, saying only that his experience was telling him that a 50/50 ownership split was not ideal to take the business forward.”¹⁸⁹ By March 2011, financial difficulties and Kremlin threats to revoke TNK-BP’s license forced the venture to declare bankruptcy and auction off its shares in the project to Gazprom, whose earlier intervention had prevented TNK-BP from expanding Kovykta production to meet its license obligations in the first place.¹⁹⁰ Unlike Shell, however, TNK-BP was able to at least recoup its investment through the auction.

The political intimidation and coercion do not stop with the companies. The government has also gone after key foreign businessmen operating in Russia in order to

¹⁸⁶ Michael Bradshaw, “Sakhalin-2 in the Firing Line,” *Pacific Russia Oil and Gas Report* (Winter 2006): 12; Hurst, “Investment Risky in Russia,” 22.

¹⁸⁷ Hurst, “Investment Risky in Russia,” 22.

¹⁸⁸ Reuters, “FACTBOX-Key Facts about Russia’s Kovykta Gas Field,” June 1, 2007, <http://www.reuters.com/article/2007/06/01/russia-kovykta-idUSL0128180320070601>.

¹⁸⁹ Reuters, “UPDATE 1-Putin Says Russia Lost Patience with Kovykta Owners,” June 4, 2007, <http://www.reuters.com/article/2007/06/04/russia-kovykta-putin-idUSL0439713820070604>.

¹⁹⁰ Catherine Belton, “Gazprom Pays \$770m for TNK-BP Gas Field,” *Financial Times*, March 1, 2011, <http://www.ft.com/intl/cms/s/0/1f0c62da-43fe-11e0-8f20-00144feab49a.html#axzz25nmXEUuZ>.

remind them that within the country, Russian interests are paramount. In 2008, then-President of TNK-BP Bob Dudley was forced to flee the country when his visa was not renewed, but he continued to run the company from a secret location outside of Russia. Shortly thereafter, “BP’s technical staff was barred from working in Russia by a Siberian court. The security service, the FSB, twice raided TNK-BP’s offices in Moscow...[Dudely] resigned in December 2008,” in effect turning the venture over to his Russian partners.¹⁹¹

Finally, an unbalanced trade relationship creates insecurity by generating conditions for economic extortion: using the imbalance as a political tool to compel a desired response from the weaker or dependent partner. In 2007, Cindy Hurst, a political-military research analyst with the U.S. Army’s Foreign Military Studies Office, accurately predicted that Russia’s growing energy monopoly and economic independence would give it:

[1] Increased political leverage...The Kremlin will undoubtedly be able to use its tightening grip over natural gas as political leverage over countries highly dependent on it for this resource. [2] A strengthening of its military. Russia is using energy as a tool to restore its world-power status. No longer a military threat, Russia could use the monies earned from these development projects to revamp its military. [3] Unfair control over pricing. Russia could opt at any time to increase its prices for natural gas during times of high demand. This not only would affect citizens of other countries but also could impact local economies or even global economies if the increases were substantial.¹⁹²

The consequences of the 2006, 2008, and 2009 gas disputes between Russia and Ukraine exposed the trade imbalance with its neighbors as a potent political weapon in Russia’s favor which it repeatedly used to extract concessions from the lesser partner or to compel action in accordance with Russia’s interests. The gas disputes also highlighted Europe’s own critical reliance on Russian energy to meet its economic needs. Meanwhile, Russia has taken several prudent moves to lessen its own economic dependency on others—particularly the West. Russia has begun to diversify its own export markets to

¹⁹¹ BBC News, “Profile: Bob Dudley,” September 30, 2012, <http://www.bbc.co.uk/news/business-10755184>.

¹⁹² Hurst, “Investment Risky in Russia,” 22.

compensate for a decreasing demand in Europe by expanding pipeline infrastructure into China, all the while blocking efforts by European nations to diversify their own energy supply by courting the energy-rich Central Asian states. Additionally, in a rare exhibition of judicious financial management, President Putin used increased rents from the boom in oil prices to pay off Russia's sovereign debt. By 2005, Russia was free and clear of its debt to the IMF, and by 2008 it had amassed \$600 billion in foreign currency reserves which were largely responsible for helping Russia ride out the 2008 financial crisis that significantly depressed other national economies.¹⁹³ This financial independence allows Russia considerable autonomy to act in its own economic interests without concern for those of its partners, competitors, or rivals.

3. A Case Study: The Sino-Japanese East China Sea Dispute

While a "capitalist peace" through economic interdependence may be appealing in theory, in reality it neither holds any weight with national decision-makers nor does it prevent conflicts from escalating significantly, even when two quarreling nations are highly reliant on each other economically. In September 2012, the Japanese government announced that it had purchased three highly contested islands in the East China Sea from a private owner.¹⁹⁴ This act provoked widespread nationalist outrage in China, and Sino-Japanese tensions over the disputed Senkaku/Diaoyu islands in the East China Sea escalated to unprecedented levels with both sides dispatching naval, coast guard, and civilian vessels to the area in order to demonstrate their resolve to protect "their territory."¹⁹⁵

This deliberate display of force did not result in a use of force, but with numerous ships from government agencies and private businesses of three separate states (including Taiwan) all converging in a small area, the potential for an incident cannot be

¹⁹³ Clifford D. Gaddy and Barry W. Ickes, "Russia after the Global Financial Crisis," *Eurasian Geography and Economics* 51, no. 3 (2010): 288, doi: 10.2747/1539-7216.51.3.281.

¹⁹⁴ Newsroom America, "Island Dispute between China, Japan Escalates," September 12, 2012, http://www.newsroomamerica.com/story/286673/island_dispute_between_china_japan_escalates.html.

¹⁹⁵ Scott Neuman, "Chinese Patrol Boats Stand Down in Islands Row with Japan," NPR, September 14, 2012, <http://www.npr.org/blogs/thetwo-way/2012/09/14/161156068/chinese-patrol-boats-stand-down-in-islands-row-with-japan>.

overlooked—especially when territorial claims such as those in the East and South China Seas are reinforced by deep-seated and emotionally charged nationalist sentiment on all sides. A ramming incident on the high-seas could escalate beyond a government’s ability to maintain a measured brinksmanship. Indeed, such sentiment was manifest in violent protests throughout mainland China as civilians burned, looted, and destroyed private Japanese businesses.¹⁹⁶ As a result, several major Japanese firms were forced to temporarily suspend operations in China, and Japanese firms saw losses on the stock market of up to seven percent.¹⁹⁷ The fact that an active naval and law enforcement presence was required attests to the failure of diplomacy and multilateral institutions to address territorial disputes. On such issues, economics hold little sway.

According to the Japanese Statistics Bureau, bilateral trade with China in 2011 accounted for “20 percent of Japan’s total value and China is the largest trade partner of Japan.”¹⁹⁸ Likewise, Japan is China’s number three trading partner.¹⁹⁹ Yet despite these close and significant economic linkages, both sides readily committed to an escalation of tensions for political purposes. There is no empirical evidence, therefore, to suggest that economic interdependence will necessarily have any deterring effect in an escalation of tensions over disputed territory in the Arctic.

In contrast to China and Japan, Russia and the United States share far weaker economic ties. As reported by the Congressional Research Service, “Russia accounted for 1.6% of U.S. imports and 0.6% of U.S. exports in 2011, and the United States accounted

¹⁹⁶ BBC News, “China Protests: Japanese Firms Suspend Some Operations,” September 17, 2012, <http://www.bbc.co.uk/news/business-19620114>. See also Amrutha Gayathri, “Anti-Japanese Protests Erupts across China; Beijing Raises Trade Threats over Disputed Islands,” *International Business Times*, September 17, 2012, <http://www.ibtimes.com/print/anti-japanese-protests-erupts-across-china-beijing-raises-trade-threats-over-disputed-islands-789678>.

¹⁹⁷ BBC News, “China Protests: Fears Rise over Japan-China Trade Ties,” September 18, 2012, <http://www.bbc.co.uk/news/business-19632047>.

¹⁹⁸ Statistics Bureau, *Statistical Handbook of Japan 2012*, Ministry of Internal Affairs and Communications, Japan, <http://www.stat.go.jp/english/data/handbook/index.htm>, 118.

¹⁹⁹ European Commission, “China: Bilateral Trade Statistics,” http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113366.pdf, 6.

for 3.3% of Russian exports and 5.3% of Russian imports.”²⁰⁰ In addition, U.S. legislation (particularly the Jackson-Vanik amendment to Title IV of the Trade Act of 1974), disputes over poultry preparation standards and protection of intellectual property rights, as well as concerns over Russian economic policies and regulations all serve to stifle any growth in bilateral trade between these two countries.²⁰¹

4. Summary

In order for FDI to work as a disincentive for conflict, a country must first attract sufficient foreign investment. It must be willing to allow FDI under conditions adequately conducive for a foreign company to make a reasonable profit and to establish effective laws that protect the property rights of that company while maintaining transparency and constancy. By these metrics, Russia hardly constitutes a reliable, fair, and predictable partner. While foreign businesses continue to seek investment opportunities in Russia, it remains a risky venture. As Cindy Hurst sums up,

Russia’s reneging on international deals creates a challenging and dangerous business environment for potential Western business partners...Although Russian technology has been improving over time, it has yet to achieve the same capability as that of the Western majors. Knowing this, Western companies might still find future deals attractive. These companies need to be shrewd in their business dealings with Russia, keeping in mind that at any time the tide can turn and politics can play a key role in ousting them from part or all of a project. This could result in billions of dollars in lost revenues.²⁰²

In other words, the foundations for a credible, effective economic interdependence with Russia simply do not exist and therefore a “capitalist peace” argument against conflict in the Arctic is not persuasive.

²⁰⁰ U.S. Library of Congress, Congressional Research Service, *Permanent Normal Trade Relations (PNTR) Status for Russia and U.S.-Russian Economic Ties*, by William H. Cooper, CRS Report RS21123 (Washington, DC: Office of Congressional Information and Publishing, June 15, 2012), <https://www.fas.org/sfp/crs/row/RS21123.pdf>, 3.

²⁰¹ Ibid., 4–5.

²⁰² Hurst, “Investment Risky in Russia,” 22.

D. CONCLUSION

The primary argument against the potential for conflict in the Arctic is that political leaders are appealing to international institutions to resolve disputes before they become militarized. A corollary to this argument is that, via the trappings of economic interdependence, Russia's need for advanced technology to locate and exploit its potentially vast reserves of hydrocarbons will sufficiently weigh in Moscow's political calculus to prevent Russia from taking militarized action against neighbors to defend its political-economic claims in the region. Given the reality of political objectives, actions, and intentions, coupled with the dearth of reliably interdependent economic ties, this chapter has exposed these "mitigating factors" against conflict as little more than wishful thinking.

While it is undeniable that the Arctic states are using international institutions focused on Arctic issues, they appear to do so out of political convenience—not out of a commitment to peaceful cooperation. The participating nations all actively pursue a combined environmental and safety agenda with their partners through the Arctic Council. Its charter, however, explicitly bans the organization from discussing issues related to military security, a point reinforced by the Ilulissat Declaration of the five Arctic states: that no legal enforcement regime other than the UNCLOS is needed in the region.

To that end, the UNCLOS does indeed provide conflict resolution mechanisms for territorial disputes and continental shelf claims, but Russia exempted itself from discussing such matters in UNCLOS fora when it acceded to the Convention. Moreover, while the United States continues to observe the UNCLOS as customary international law, it remains outside the Convention and is unable and unwilling to use its dispute resolution mechanisms.²⁰³

²⁰³ According to the current draft of the Senate Foreign Relations Committee recommendation for advice and consent, the United States, too, will declare upon ratification its own exemption from UNCLOS jurisdiction over matters related to territorial and continental shelf disputes. (See Part VIII, Text of Resolution of Advice and Consent to Ratification, Section 2 (2), of the Senate Foreign Relations Committee Report recommending the Advice and Consent of the Senate to the UNCLOS. U.S. Senate, Committee on Foreign Relations, Convention on the Law of the Sea, S. Exec. Rept. 110-9 (2007), 19).

The NATO-Russia Council is likewise an ineffective avenue for conflict resolution, as the Russian invasion of Georgia in 2008 clearly demonstrated. The NRC was not utilized before, during, or after the event as a mechanism to preserve peace and stability in the greater Eurasian region. As concerns the Arctic, the region is not a focus for the Alliance; and given Canadian resistance, it is unlikely to become one any time soon.

On the economic front, foreign oil and gas companies continue to seek investment opportunities in Russia, but the prospects for achieving an interdependence sufficiently robust to prevent conflict should disputes arise are clearly poor. As a matter of fact, when there is a disagreement, Russia simply takes what it wants and leaves the foreign company without any recourse whatsoever. This is the risk that these businesses take when attempting to turn a profit in a country with a strong tradition of rule-by-law, vice rule-of-law. As then-President Dmitri Medvedev noted in 2008, “Russia is a country where people don’t like to observe the law. It is, as they say, a country of legal nihilism.”²⁰⁴ Despite efforts to reform the system during his Presidency, political elites and public servants alike continue to profit from rampant government corruption and the extortion of businessmen.²⁰⁵ In view of Russia’s practice of economic warfare and its relative financial independence, Russia is beholden to no one except President Putin, while holding its customers hostage. This is hardly a hospitable environment for a “capitalist peace” to thrive.

Thus, rather than being remedies for conflict, international institutions and economic interdependence serve only to constrain actions insofar as actors regard them as serving their interests. They are effective when all parties agree on an issue, but they do not serve as sufficient dispute resolution mechanisms when interests differ. Nor do economic ties serve as sufficient deterrence against an escalation of conflict in a political

²⁰⁴ Dmitri Medvedev, quoted in Lionel Barber, Neil Buckley and Catherine Belton, “Laying down the law: Medvedev vows war on Russia’s ‘legal nihilism,’” *Financial Times*, December 24, 2008, <http://www.ft.com/intl/cms/s/0/e46ea1d8-c6c8-11dd-97a5-000077b07658.html#axzz27n6dI9Ob>.

²⁰⁵ Yana Yakovleva, “Medvedev’s Battle against Legal Nihilism,” *The St. Petersburg Times*, January 26, 2010, <http://www.sptimes.ru/story/30693>.

calculus. In such cases, a history of resorting to armed conflict only serves to aggravate the perception of a threat to one's interests in the Arctic and other regions.

IV. CONCLUSION

“Would you tell me, please, which way I ought to go from here?” said Alice to the Cheshire Cat.

“That depends a good deal on where you want to get to,” said the Cat.

—Lewis Carroll,
*Alice’s Adventures in Wonderland*²⁰⁶

There is ample reason and precedent suggesting that countries will resort to armed conflict to secure their interests, especially when those interests are regarded as vital to their national security. While war in the Arctic appears unlikely at present, this thesis has analyzed why an escalation of territorial and resource disputes in the Arctic up to and including the use of force cannot and should not be ruled out. The potential for U.S.-Russian maritime conflict in the region is genuine.

A. SUMMARY OF THE THREAT

Opportunity, capability, and perceived intent on their own do not cause conflict, but they do serve to increase anxiety about an apparent threat to national interests. It is when these three factors combine that the potential for conflict emerges. All that remains for an otherwise benign event to quickly escalate into a militarized interstate dispute is a sufficient motive or misunderstanding. In the fog before war, an ostensibly banal event could quickly escalate into a political power play between navies in the presence of historical mistrust, a perception of vulnerability, and nationalist sentiment.

In the Arctic, such motives include Russia’s critical reliance on hydrocarbon resources to maintain its political and economic stability, and therefore its national security. For the United States and its NATO allies, the need to maintain and credibly defend their sovereignty and their own economic interests provides ample incentive to act decisively, if necessary. When national security is challenged or threatened by another

²⁰⁶ Lewis Carroll, *Alice’s Adventures in Wonderland and Through the Looking Glass* (London: J.M. Dent & Sons Ltd., 1961), 54.

power, the potential for militarized conflict can quickly become an actual conflict. Despite the sub-zero physical climate, the Arctic is a hotbed of competing interests.

Receding ice cover in the northern cryosphere presents Arctic nations, and others, with considerable economic opportunities. Whether to exploit a potential “treasure trove” of natural resources or simply to capitalize on time- and money-saving transportation routes, political leaders are under increasing pressure to resolve previously frozen or otherwise insignificant disputes and make these resources available as soon as possible to their constituents. Lack of resolution is bad for business: it creates a “wild west” (or, in this case, a no-law north) of uncertainty as to the legal standing of enterprises and exposes countries and companies alike to unnecessary harassment and possible prosecution by rival interests.

Increasing economic opportunities go hand-in-hand with an increased presence in the region, creating an environment for potential conflict. Economic expansion is triggering an associated build-up in military and law enforcement capability in order to protect, defend, and regulate interests and claims. If economic encroachment were not enough to cause anxiety among the Arctic powers, the subsequent militarization of the Arctic has also caused alarm, making countries feel increasingly vulnerable to conventional military pressure from a previously ice-obstructed front.

At present, only Russia is capable of defending its claims in the Arctic militarily. Given Russia’s economic dependence on hydrocarbon resources—which the Arctic promises to offer in abundance—Moscow’s economic claims in excess of its recognized EEZ are likely to encroach on, or overlap with, the legitimate claims of neighbors. But it stands alone. Russia’s overwhelming might in this domain may eventually make “right” in its favor if NATO is unable to deter assertive uses of force similar to those to which the Russian Coast Guard continually subjects Japan near the Kuril Islands. Any loss in this regard would be much more damaging to NATO’s deterrence credibility than its current inaction.

Unless Canada, Denmark, Norway and the United States can come together under the NATO banner and make the Arctic a centerpiece of the Alliance’s collective defense

agenda for the twenty-first century, they each risk standing alone in the Arctic as well, and with a significantly smaller troop-to-task capability than their geopolitical rival. Simon Ollivant's 1984 warning of the dangers of internal dispute within the Alliance is perhaps even more salient today. Analyzing the effects of the latest developments in military technology, force dispositions, and resource and sovereignty claims on the military stability of the region, Ollivant concluded that the greatest dangers to NATO unity were an unbalanced American hegemony in the region and increased political conflict among allied members over contested economic interests in the region.²⁰⁷ Denmark and Canada have yet to officially resolve their dispute over Hans Island. Canada and the United States continue to argue over the legal status of the Northwest Passage and the Beaufort Sea. Either one of these disputes could undermine decades of Alliance cohesion.

Meanwhile, Russia's actions and rhetoric in the Arctic leave no room to deduce anything but a firm and committed intent on the part of its leadership to secure its claims. There have been scant, if any, peaceful actions undertaken by the Putin and Medvedev administrations to back up their peace-seeking rhetoric. Calls for diplomatic resolution of territorial disputes in the Arctic and for working "within existing international agreements and mechanisms" have only been operationalized through agreements to cooperate on search and rescue efforts and on (competitive) scientific exploration and research for submission to the Commission on the Limits of the Continental Shelf (CLCS), a forum that has no binding authority to settle such disputes. All the while, however, Russia's ambitious militarization of the Arctic has been clearly reinforced with explicit rhetoric proclaiming its intent to defend its national security interests. For Russia, the natural resources in the Arctic are a national security asset of strategic importance.

Canada, too, beats the drum of sovereign defense in the Arctic. Though its rhetoric is significantly less militaristic than that of Russia, it is nevertheless increasingly nationalistic. Actions, in this case, speak for themselves. The Canadians have expressed an intention to build up forces in the region to the extent necessary to defend their

²⁰⁷ Ollivant, "Arctic Challenge to NATO," 20–21.

sovereignty. If Prime Minister Stephen Harper had his way, this build-up would be happening more quickly than it has been. Indeed, financial constraints constitute the only reason that the four NATO countries in the Arctic have not been building up their Arctic capabilities more rapidly.

The bottom line is that the intent of the Arctic nations to defend their regional and broader security interests is real. The capabilities, while in some cases only planned or very slowly coming into service, are materializing, and the economic opportunity has never been greater and will only increase in the future. The threat of a militarized conflict in the Arctic is therefore real as well.

B. ANALYZING THE EQUATION

This thesis has examined several factors which, in aggregate, serve to increase the potential for, and likelihood of, maritime conflict in the Arctic. What follows is a review of the methodology used to assess this likelihood. Subsequently, six factors are analyzed, including an assessment of the extent to which these variables affect the likelihood of maritime conflict in the Arctic and a systematic overview of key points made in this thesis as they relate to these factors.

As discussed in the introduction to this thesis, six factors are assessed based on the facts presented herein and assigned a value reflecting the significance of these factors in increasing the likelihood of conflict on an ordinal scale of HIGH (2), MEDIUM (1), and LOW (0), except in the cases of the role of international institutions and the degree of economic interdependence, where the values assigned are reversed (i.e., LOW = 2, MEDIUM = 1, and HIGH = 0). Russia and the United States are scored separately. However, where the effects of alliances or other external security interests are concerned, such values are marked with an asterisk (*) indicating that this score is higher than it would be if the impact of a particular variable on a country were considered in isolation. The higher the cumulative value of all the variables, the higher the likelihood that conflict in the Arctic will occur. The maximum score possible, therefore, is 24, indicating that conflict in the Arctic is extremely likely. The minimum score possible is 0, indicating that there is no possibility of conflict in the Arctic.

Table 2 provides a summary of the values assigned to these six factors for Russia and the United States. Most importantly, Table 3 provides an aggregate score and its correlate assessment for the likelihood of maritime conflict in the Arctic, based on the Matrix in Table 1.

1. Degree of Economic Dependence on Hydrocarbon Resources in the Arctic (and Elsewhere)

For Russia – HIGH (2); for the United States – LOW (0)

While estimates vary widely, they generally indicate that 35 to 50 percent of the Russian federal budget derives directly from hydrocarbon export taxes and sales.²⁰⁸ This has direct implications for Russia's political, economic, military, and social stability and therefore for its sense of security or threat. Contrary to the hopes that the rapid economic growth in Russia during President Putin's first two terms in office (2000–2008) was proof that the economy was diversifying away from a dependence on oil, subsequent analysis has exposed the magnitude and scope of Russian dependence as a critical vulnerability of the state. This reliance on natural resources is probably a key reason that, in the latest Russian Arctic Strategy, they were described as a strategic resource for national security.²⁰⁹ The Russian government has made explicit its intention to use military might to defend its Arctic claims, if necessary. As it stands, Russia has been unable to secure the technology and expertise necessary to exploit most of its uncontested Arctic resources. If, as predicted, Russia's currently exploited oil and gas fields in Siberia and the Far East begin to decline in output by 2020, funding for government operations, including defense activities and procurement, would be drastically diminished, and this

²⁰⁸ See, for example the investment prospectus for TNK-BNP by Vladislav Kovalchuk, "Russian Oil Sector Taxation: Federal Budget Wealth or Oil Sector Health?" BNP Paribas Investment Partners, December 10, 2011, http://www.tkb-bnpparibasip.info/i_eng/msg_i/140/p1112021_russian_budget_oil_v3.pdf?941. Also, the International Tax and Investment Center Bulletin edited by Diana Nepolitano, "Ministry of Finance of the Russian Federation Expert Meeting on Oil and Gas Taxation," ITIC Bulletin Special Edition, July 2011, http://www.iea.org/work/2011/tax_russia/Moscow_bulletin.pdf. Also, Jacques Sapir, "Russia Regional Report: Business as Usual, Despite the Financial Crisis," *World Oil Online*, 323, No. 1, January 2011, <http://www.worldoil.com/Business-as-usual-in-Russia,-despite-the-financial-crisis-January-2011.html>.

²⁰⁹ Dmitry Medvedev, "Osnovy gosudarstvennoi politiki Rossiiskoi Federatsii v Arktike na period do 2020 goda i dal'neishuyu perspektivu," Security Council of the Russian Federation, September 8, 2008, <http://www.scrf.gov.ru/documents/98.html>.

would probably stimulate the country's historical paranoia of encirclement and weakness. In these circumstances, even benign and unrelated events might easily be construed as a threat and trigger a defensive response from Moscow. Alternatively, a loss of market share or a decrease in market value for its exported commodities could also shrink Russia's revenue.

To that extent, one of the unanticipated consequences of Russia's economic warfare against Ukraine in 2006, 2008 and 2009 was to expose the critical vulnerability of several European nations to Russian political will due to their own dependence on Russia as an energy resource provider. As a result, the European Union has begun seeking alternative sources of energy, which Russia has sought to disrupt or block whenever possible, especially with its Central Asian neighbors. Meanwhile, Russia is attempting to secure these resources for itself and to diversify its own export markets in Asia to compensate for any loss in Europe.

Unlike Russia, neither Canada, Denmark, Norway, nor the United States is so critically dependent on Arctic hydrocarbon resources (or Russian exports thereof) that a failure to secure its claims could lead to political instability. Political and social interests, however, could nevertheless motivate a military resolution for these countries for other reasons.

2. Value of Contested Claims

*For Russia – HIGH (2); for the United States – MEDIUM (1)**

In total, Russia stands to obtain rights over approximately five billion tons of fuel equivalent, according to the Russian Minister of Natural Resources, Yury Trutnev.²¹⁰ At a rate of approximately \$100 per barrel, this equates to a potential revenue of \$350 trillion over the life of such deposits. The United States Geological Survey estimates that the probability of finding at least one hydrocarbon field with recoverable resources of at least 50 million barrels of oil equivalent in the vicinity of the Lomonosov Ridge is less

²¹⁰ RIA Novosti, "Lomonosov Ridge Could Bring Russia 5 Billion Tons of Extra Fuel," October 4, 2007, http://www.energy-daily.com/reports/Lomonosov_Ridge_Could_Bring_Russia_5_Billion_Tons_Of_Extra_Fuel_999.html.

than 30 percent and estimates that there is probably only about 2.5 billion barrels of oil equivalent in that area (vice the approximately 35 billion barrels in the Russian estimate).²¹¹

Nevertheless, according to Dmitry Medvedev, then the Russian President, the sale of Arctic resources alone already “accounts for around 20 percent of Russia’s gross domestic product and 22 percent of [its] national exports.”²¹² As the oil and gas deposits of Western Siberia are depleted over the next ten to fifteen years, Moscow will be forced to rely increasingly on the potential reserves in the Arctic to compensate for this loss and to stabilize the dynamics of its intractable reliance on hydrocarbon resources to fund its national security and government operations. This dynamic serves as a significant driver of Moscow’s motivation to press for as large a territorial claim in the Arctic as possible.

Whereas the value of Arctic claims in terms of security is economic and financial for Russia, the value is social and political for the more-developed NATO Arctic states. The only contested claim between Russia and the United States in the Arctic is the unofficially recognized status of the Maritime Boundary in the Bering and Chukchi Seas on the part of Russia. The U.S. Coast Guard frequently interdicts Russian commercial vessels poaching in the U.S. EEZ. This poaching has already led to several incidents of low-level conflict. Due to the U.S. Coast Guard’s lack of available assets to adequately accomplish this mission, Russian commercial vessels simply exploit the numerous gaps in U.S. law enforcement presence, increasing the potential for future altercations unless and until a politically recognized and enforced agreement can be reached.

The economic dispute between Canada and the United States in the Beaufort Sea is unlikely to erupt into militarized conflict between the two allies, and any disagreements will probably be settled at the diplomatic level. Arctic resources are an economic “nice-

²¹¹ Kenneth J. Bird et al., “Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle,” U.S. Geological Survey Fact Sheet 2008–3049 (2008), <http://pubs.usgs.gov/fs/2008/3049/>, 4. Conversion of metric tons to barrels (1 MT = 7 barrels) is derived from the formula provided by Robert Fogt at http://www.onlineconversion.com/forum/forum_1058197476.htm and should be regarded as an approximate measure.

²¹² Dmitry Medvedev, “Speech at Meeting of the Russian Security Council on Protecting Russia’s National Interests in the Arctic,” the Kremlin, September 17, 2008, http://archive.kremlin.ru/eng/text/speeches/2008/09/17/1945_type82912type82913_206564.shtml.

to-have” for these countries, but they are not an imperative in either the public or private sector. The ongoing dispute over the status of the Northwest Passage, however, does have the potential of becoming militarized, especially when considering the possibility that Canadian nationalistic sentiment could turn concerns over sovereignty and environmental protection into political pressure to defend Canadian interests in the region against U.S., European, and other economic actors’ recognition of the passage as international waters. To that end, the United States has demonstrated a willingness to use law enforcement vessels to maintain this claim, even at the risk of political discord between the two allies. As the Northwest Passage continues to be open for commercial activity for longer and more stable periods of time, U.S. economic interests are likely to press for the maintenance of the U.S. government position that the waterway constitutes international waters, possibly leading to future “freedom of navigation” transits by U.S. law enforcement or naval vessels. The confrontation between China and Japan over the Diaoyu/Senkaku islands demonstrates the potential role of nationalist sentiment and political posturing in rapidly militarizing an otherwise diplomatic issue.

Meanwhile, the disputed economic claims between Canada, Denmark, and Russia over the ownership of the Lomonosov Ridge have the potential to draw in the United States to help defend the claims of its allies militarily against Russian assertions if a negotiated settlement cannot be reached. In the short-term, however, none of the NATO members has a sufficient maritime capacity to defend its claims in the Arctic.

3. Ability to Defend Claims

For Russia – HIGH (2); for the United States – LOW (0)

With the largest Arctic fleet in the world, both in terms of military assets and icebreaking support vessels, Russia is well-positioned to back up its policy with action. In addition to bolstering their maritime presence in the Arctic, the Russians have also increased their air and ground force presence in the region—further increasing NATO’s uneasiness that Moscow is re-militarizing the Arctic. In July 2012, Vladimir Putin, in his capacity as President, announced that he expected to increase Russia’s naval order of

battle by 51 units by 2020, and that many of these units would be based in the Arctic.²¹³ The nuclear capability of several of Russia's icebreakers gives its fleet a wide margin of range and maneuverability, making access to its most distant claims logistically feasible, and defense thereof possible.

NATO's Arctic members are currently limited in their ability to operate in the Arctic in terms of both maneuverability (far fewer icebreakers or ice-capable patrol vessels) and defensive posture. Whereas Russia has a strategic base in the Arctic and its units operate regularly in icy conditions as a matter of course, only Canada is actively discussing the development of a deep-water Arctic port to sustain its northern engagement strategy. In addition to Canada's current fleet of six Arctic-capable icebreakers, plans are already underway to build at least one new one (to be ready by 2017), as well as six to eight new ice-capable armed patrol vessels (based on the Norwegian Svalbard Class) for patrolling the "internal" waters of Canada's claimed archipelago year round. Until these ships are commissioned (in 2015 at the earliest), the Canadian Navy is only able to patrol the Arctic in the spring, summer, and autumn when there is no ice cover. For its part, the United States is without effective defense or adequate law enforcement footing in the Arctic, even within its uncontested Arctic EEZ. The United States has only one operational icebreaker, and it is incapable of operating independently in heavy ice conditions. Even with icebreaking assistance from its allies, though, the U.S. Navy's surface fleet lacks sufficient training, experience, and doctrine for operating in the region.

Nevertheless, an arms competition is beginning in the Arctic. While its pace is likely to be slow and the underlying intention may very well be to ensure an effective constabulary presence in the region as these waters open up to increased activity and exploitation, past uses of force to achieve national security objectives only heighten tensions over disputed jurisdictions and fears of encroachment, and increase the perception on both sides that conflict is more likely.

²¹³ Gleb Bryanski, "Russia to Get Stronger Nuclear Navy, Putin Says," *Reuters*, July 30, 2012, <http://www.reuters.com/article/2012/07/30/us-russia-putin-navy-idUSBRE86T1D320120730>.

4. Historical Propensity for Militarized Conflict

For Russia – HIGH (2); for the United States – HIGH (2)

The U.S. invasion of Iraq in 2003 and Russia's invasion of Georgia in 2008 serve as primary evidence for both countries that the other is willing and able to intervene militarily in a region when national security is perceived to be at stake. In addition to these recent full scale wars, Russia and the United States have both resorted to shows and uses of forces in disputes over natural resources. Russia's heavy-handed tactics against Japanese fishing vessels near the Kuril Islands have escalated to the point of shots being fired and even resulted in a casualty. The United States actively prosecutes poachers in its EEZ and has historically seized Russian vessels engaged in illegal fishing in U.S.-claimed waters.

Beyond the Russian and American propensity to engage in militarized interstate disputes, other nations have also shown a willingness to use force short of war to achieve their political objectives. Most notably, China and Japan have both historically used force and have recently escalated their disputes to shows of force in the East China Sea in their efforts to secure both land and maritime resources. Furthermore, China has even resorted to uses of force in the South China Sea to obtain its objectives and secure resource claims.²¹⁴ In all these cases, neither international institutions, nor economic interdependence have restrained countries from taking military action.²¹⁵

²¹⁴ James Hookway, "Philippine Warship in Standoff with China Vessels," *The Wall Street Journal*, April 11, 2012, <http://online.wsj.com/article/SB10001424052702303815404577336550439399694.html?mod=googlenews>.

As recently as April 12, 2012, Chinese and Philippine maritime vessels had "engaged each other after the Philippine vessel...attempted to arrest the crew of several Chinese fishing boats who were anchored at Scarborough Shoal, off the Philippines' northwest coast but which is also claimed by China. The Philippine government said Chinese surveillance vessels intervened to prevent any arrests, leading to the standoff, and that Filipino sailors who inspected the Chinese vessels on Tuesday found illegally collected corals and live sharks in one of the fishing boats."

²¹⁵ Of course, there is something to be said for theories of nuclear deterrence. While it can be argued that nuclear-capable state dyads have not historically tended to engage each other directly, even in low-level conflict, there is precedent: in 1969, the Soviet Union and a newly nuclear-capable China engaged in several border clashes that resulted in over 100 casualties. A nuclear deterrent, therefore, is only effective in reducing the likelihood that a full-scale, existential war might erupt. Both Russia and the United States essentially follow a "no first-use" policy with regard to nuclear weapons. It is reasonable to assume, therefore, that any conflict between these two dyads would necessarily involve a series of escalations in the conventional realm well before the use of nuclear weapons was considered.

5. Role of International Institutions

For Russia – LOW (2); for the United States – MEDIUM (1)

While it is undeniable that the Arctic states are using international institutions focused on Arctic issues, they appear to do so out of political convenience—not out of a commitment to peaceful cooperation. The participating nations all actively pursue a combined environmental and safety agenda with their partners through the Arctic Council. Its charter, however, explicitly bans the organization from discussing issues related to military security, a point reinforced by the Ilulissat Declaration of the five Arctic states: that is, no legal enforcement regime other than the UNCLOS is needed in the region.²¹⁶

To that end, the UNCLOS does indeed provide conflict resolution mechanisms for territorial disputes and continental shelf claims, but Russia exempted itself from discussing such matters in UNCLOS fora when it acceded to the Convention. Moreover, while the United States continues to observe the UNCLOS as customary international law, it remains outside the Convention and is unable and unwilling to use its dispute resolution mechanisms.

The NATO-Russia Council is likewise an ineffective instrument for conflict resolution, as the Russian invasion of Georgia in 2008 clearly demonstrated. The NRC was not effectively utilized before, during, or after the event as a mechanism to preserve peace and stability in the southern Caucasus or the greater Eurasian region. As concerns the Arctic, the region is not a focus for the Alliance; and given Canadian resistance, it is unlikely to become one any time soon.

6. Degree of Economic Interdependence

For Russia – LOW (2); for the United States – LOW (2)

On the economic front, foreign oil and gas companies continue to seek investment opportunities in Russia, but the prospects for achieving an interdependence sufficiently

²¹⁶ “The Ilulissat Declaration,” May 28, 2008, http://www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf.

robust to prevent conflict should disputes arise are clearly poor. As the recent Sino-Japanese example demonstrates, despite close and significant economic linkages, both sides readily committed to an escalation of tensions for political purposes. The United States and Russia share far weaker economic ties. What Medvedev aptly called “legal nihilism” and rampant government corruption pervade Russia’s interactions with international entities. As a matter of fact, when there is a disagreement, Russia simply takes what it wants and leaves foreign companies without any recourse whatsoever. This is hardly a hospitable environment for a “capitalist peace” to thrive. There is no empirical evidence, therefore, to suggest that economic interdependence will necessarily have any moderating effect in an escalation of tensions over disputed territory in the Arctic.

Thus, rather than being reliable remedies for conflict, international institutions and economic interdependence serve only to constrain actions insofar as actors regard them as serving their interests. They are effective when all parties agree on an issue, but they do not serve as sufficient dispute resolution mechanisms when interests differ. Nor do economic ties serve as sufficient obstacles to an escalation of conflict in a political calculus. In such cases, a history of resorting to armed conflict only serves to aggravate the perception of a threat to national interests in the Arctic and other regions.

| FACTOR | RUSSIA | UNITED STATES |
|------------------------------------|---------------|----------------------|
| HYDROCARBON DEPENDENCE | 2 | 0 |
| VALUE OF CONTESTED CLAIMS | 2 | 1 |
| CAPABILITY TO DEFEND CLAIMS | 2 | 0 |
| PROPENSITY FOR CONFLICT | 2 | 2 |
| INTERNATIONAL INSTITUTIONS | 2 | 1 |
| ECONOMIC INTERDEPENDENCE | 2 | 2 |
| TOTAL | 12 | 6 |

Table 2. Aerandir Conflict Assessment Index. Summary of scores assigned to Russia and the United States based on the extent to which identified factors contribute to the likelihood of maritime conflict in the Arctic.

| SCORE | LIKELIHOOD |
|------------------|-------------------|
| AGGREGATE | 18 |
| | LIKELY |

Table 3. Aggregate Assessment of Likelihood of Conflict (ref. Table 1).

C. CONFLICT IN THE ARCTIC

While not assigning an expected timeframe or event horizon for such an outcome, this thesis has sought to examine (a) what factors could increase the risk of a U.S.-Russian maritime conflict in the Arctic, and (b) what measures the United States—and the U.S. Navy in particular—might take to be prepared for deterrence and defense in such an eventuality. With an analysis of the six factors discussed in the previous section, one is in a better position to gauge the likelihood of a militarized dispute erupting in the Arctic and to understand the reasons why. Armed with this insight, policy-makers can make more informed decisions as to the allocation and utilization of scarce resources. So, how likely is conflict in the Arctic and what should policy-makers do about it?

1. Potential for Maritime Conflict in the Arctic

Based on the methodology established for this analysis, it can be reasonably assessed that conflict in the Arctic is likely. To put this another way, with a score of 18 out of 24 possible points, there is a 75 percent chance that maritime disputes involving the United States and Russia will occur in the Arctic necessitating the show or use of force to achieve a political objective. It should be reiterated that this assessment is acknowledged to be an analytically subjective conclusion and that the intervals of measurement are notably coarse. The evidence presented in this analysis, however, supports this conclusion. Policy-makers should take care not to discount the physical indicators and declared policies of other Arctic nations when judging the seriousness of their intent to protect their various claims in the region. Advocates of a “Pax Arctica” involving regional cooperation ignore the more pragmatic factors underlying international relations and the actual limits of international institutions and economic incentives in restraining actors’ behavior in an anarchic system.

2. Why the United States Should Care: Recommendations for Policy and Action

The prioritization fallacy of politicians assumes a model of fiscal discipline in which some aspects of national and collective defense are more important than others and thus deserve more immediate attention and funding. In today’s globalized international system, economic warfare can be just as costly to a nation as conventional warfare. Indeed, adversaries strive to exploit gaps and other weaknesses in defensive strategies, rather than to attack a “prioritized” strength head-on. The Arctic may be NATO’s Achilles heel. The threat presented by an opening Arctic should be taken more seriously by the Alliance’s political leaders. At the same time, it may be NATO’s salvation. The region presents the Alliance with its most credible mission since the end of the Cold War as a political-military organization—an opportunity to rejuvenate its collective defense doctrine in the face of a new form of warfare. To protect itself, the Alliance must act now to enhance its (collective) military and (national) law enforcement presence in the region. Moreover, the United States should close the gap legally and diplomatically by acceding to the UNCLOS. Only a comprehensive approach can ensure that the Alliance’s shared

security interests are well-defended in the international arena. An ounce of presence now would cost much less than a pound of cure later.

Economic rivalries aside, the Arctic members of NATO suffer from a large gap between their political commitments in the region and their ability to honor them. As the Arctic ice continues to recede more quickly every year on average, there is simply no time to waste in beginning the construction of the necessary platforms and infrastructure to fill this gap before the Arctic states become overwhelmed with regulating commercial traffic and conducting defensive patrols. It is this build-up of dual-purpose capabilities, however, that serves to feed Russia's threat perception of a NATO determined to encircle and "contain" it. Such a sentiment cannot be ignored when President Putin reiterates it in public speeches and pledges to counter this perceived threat by building up Russia's own forces to even out the playing field in the Arctic, even though Russia's military capabilities in the region are already clearly ahead.²¹⁷ It is therefore pointless for NATO allies to worry too much about how their own activities will affect Russia's political-military calculus. Given prevailing Russian attitudes, such activity will be framed in a NATO vs. Russia context for the foreseeable future. In the meantime, the United States and its NATO allies should pursue their own political agendas and focus on strengthening their capabilities in the Arctic.

At present, the United States and its NATO allies as a whole are unable to provide the necessary physical surface presence required by Arctic geopolitics. While outsourcing some of the U.S. Coast Guard's missions (such as survey and research) might be possible, many of its statutory mandates require that the vessels be owned by the government and that the missions be conducted by trained and qualified Coast Guard personnel only (for instance, sovereignty operations and law enforcement functions). Currently, only one U.S. Coast Guard icebreaker is operational. At least two new ships

²¹⁷ "It is incomprehensible why it's [NATO] still around...This [NATO's presence on Russia's borders] poses genuine threats to our territory. Needless to say, in that case we will have to build our defense policy accordingly so as to neutralize these threats."

Vladimir Putin, as quoted by RIA Novosti, "Putin Criticizes NATO as Cold War Throwback," October 5, 2012, http://en.rian.ru/military_news/20121005/176426452.html.

(to make three in total) are necessary to minimally fulfill Coast Guard missions, according to a conservative National Academies estimate.²¹⁸

The U.S. Coast Guard leadership has taken the issue seriously and continues to press Congress for the necessary funds to construct six heavy and four medium icebreakers immediately, just to meet the statutory missions of the service. This would also bring the combined NATO capability to par with Russia's Arctic order of battle.

In the meantime, of the NATO allies in the Arctic only Canada is taking the necessary steps to meet the future defense and law enforcement needs presented by an opening Arctic region, and then only on a unilateral basis and not as part of a concerted, comprehensive Alliance program. Perhaps a rising Canada will take a much-needed leadership role in the "True North" and provide the crucial motivation within NATO to spur its Arctic allies into action. Given Canada's present position on the subject, however, it is incumbent on the United States, in cooperation with Norway and Denmark, to promote a more robust Arctic agenda for the Alliance.

Finally, all four NATO allies should conduct combined Arctic show-of-force (and capability) exercises in the region, not only to practice operating in the environment, but also to establish and validate a truly sound doctrine for the collective defense of Arctic economic resources and maritime sovereignty.

3. When Will the Ice Break?

While it remains outside the scope of this thesis to support predictions of when policy-makers can expect conflict to occur in the Arctic, it is fitting to end with some brief speculation on the topic in order to frame and guide decisions on how to implement the recommendations presented herein.

There are three separate deadlines which provide an outline for expectations. In the immediate short-term, Russia has stated its intention to submit evidence in support of its continental shelf claims to the Commission on the Limits of the Continental Shelf

²¹⁸ The National Academies, *Polar Icebreakers in a Changing World: An Assessment of U.S. Needs*, 100.

(CLCS) by the end of 2012. Due to requirements in the UNCLOS, Canada and Denmark must themselves submit their initial claims by November of 2013 and 2014 respectively. Once the CLCS has made its determination regarding the validity and delineation of their claims, it will be up to the three countries to negotiate delimited boundaries among themselves. This process could be quick if there are no contentious findings made by the CLCS, but it appears likely that disagreements will occur and lead to the first window for conflict in the 2015 to 2020 timeframe as the three nations begin to defend their claims more actively by establishing a physical presence in the areas under dispute – laying the foundations for a possible determination of historic state practice and *opinio juris*.

In the mid-term, the predicted imminent decline in Russian land-based oil and gas production will signal the opening of the second window for conflict around 2020 to 2030. During this period, the Russian government will be under increased pressure to locate, secure, and exploit alternative sources of hydrocarbons in order to maintain stable revenues for government operations. There is already evidence that Russia's economy is weakening, which could increase the likelihood of conflict in the near- to mid-term as fears of domestic unrest and instability lead to increased sensitivities to external events and accusations of foreign "meddling" and encirclement. As Charles Clover of the *Financial Times* reports, "Russia's petrodollar surplus...is poised to vanish as early as 2015...The eventual transition to a 'twin deficit economy,' where both the government budget and the external trade balance are negative, will be a rude awakening for Russian policy makers."²¹⁹ If the "short-term" territorial conflicts have not been resolved by this point, Russia can be expected to more forcefully (that is, militarily) defend its excessive claims in order to control as many potential deposits of resources as possible. By this time, a sufficient number of icebreakers will be required to carry out statutory U.S. Coast Guard missions, and a comprehensive Arctic doctrine will need to be worked out for U.S. and NATO operations in the region in support of civil authorities and collective defensive operations.

²¹⁹ Charles Clover, "Russia Faces end of Petrodollar Surplus," *Financial Times*, October 3, 2012, <http://www.ft.com/intl/cms/s/0/313c4ffc-0d6e-11e2-bfcb-00144feabdc0.html#axzz2BUBXmMY5>.

Finally, in the longer term, the gradual opening of Arctic waterways to commercial traffic on a seasonal basis by 2030 will increase the need for persistent and pervasive constabulary patrols by all Arctic nations in order to regulate this activity. Not only will more ice-capable patrol vessels be required, but so too will be a robust logistics infrastructure, to include basing, transportation, supply, and communications. This third window for conflict in the Arctic will probably occur in the 2030 to 2045 time frame. The increase in commercial traffic activity will heighten tensions in U.S.-Canadian relations if a political compromise on the status of the Northwest Passage has not been reached, keeping in mind that the ultimate status of Russia's Northeast Passage would be likewise affected. As Canada is extremely sensitive to matters of Arctic sovereignty and Russia is are unlikely to welcome unrestricted movement through its backyard, it should be expected that the same nationalist sentiment that erupted in the Sino-Japanese row over the disputed Senkaku/Diaoyu Islands would likewise be manifest in these cases as well, leading to a quick, and potentially intense, confrontation involving the United States, Russia, and Canada.

This thesis has argued that the likelihood of maritime conflict in the Arctic is real and credible. There is reason to believe, however, that while conflict is likely, it is not inevitable. In the end, the road that one travels is largely determined by the destination one intends to reach and the decisions made, or not made, along the way.

LIST OF REFERENCES

- Acheson, Chris. "Disputed Claims in the East China Sea: An Interview with James Manicom." *The National Bureau of Asia Research*. July 25, 2011. http://www.nbr.org/downloads/pdfs/PSA/Interview_Maincom.pdf.
- Apps, Peter. "Geopolitics, Resources Put Maritime Disputes Back on Map." *Reuters*, October 1, 2012. <http://www.reuters.com/article/2012/10/01/us-maritime-disputes-idUSBRE8900BG20121001>.
- Arctic Council. "History." <http://www.arctic-council.org/index.php/en/about-us/history>.
- . "Ottawa Declaration." September 19, 1996. <http://www.arctic-council.org/index.php/en/about/documents/file/13-ottawa-declaration>.
- Arctic Economics. "United States – Russian Maritime Boundary and Exclusive Economic Zones." January 11, 2012. <http://arcticecon.wordpress.com/>.
- . "Where is the Beaufort Sea Boundary between the U.S. and Canada?" August 26, 2009. http://benmuse.typepad.com/arctic_economics/2009/08/us_canada_beaufort_sea_boundary.html.
- Arctic Portal. "About the Arctic Council." <http://www.arcticportal.org/arctic-council>.
- Associated Press. "Russia to deploy 2 Army Brigades in Arctic." July 1, 2011. <http://www.signonsandiego.com/news/2011/jul/01/russia-to-deploy-2-army-brigades-in-arctic/>.
- . "Putin Says Russia Will Expand Presence in Arctic." June 30, 2011. <http://www.signonsandiego.com/news/2011/jun/30/putin-says-russia-will-expand-presence-in-arctic/>.
- Baev, Pavel K. "From West to South to North: Russia Engages and Challenges Its Neighbors." *International Journal* 63, 2 (Spring 2008): 291–305. <http://www.jstor.org/stable/40204363>.
- Baker, James and Michael Byers. "The Beaufort Sea Boundary Dispute: Identifying and Assessing Options." Michael Byers on Politics. February 25, 2010. <http://byers.typepad.com/files/baker-byers-discussion-paper-25-feb-2010.pdf>.
- BBC News. "Canadians 'Support More Troops to Defend Arctic Claims.'" 25 January, 2011. <http://www.bbc.co.uk/news/world-us-canada-12272312>.

- . “China Protests: Fears Rise over Japan-China Trade Ties.” September 18, 2012. <http://www.bbc.co.uk/news/business-19632047>.
- . “China Protests: Japanese Firms Suspend Some Operations.” September 17, 2012. <http://www.bbc.co.uk/news/business-19620114>.
- . “Japanese Fisherman Killed by Russians.” August 16, 2006. <http://news.bbc.co.uk/2/hi/4797021.stm>.
- . “No Progress in China-Japan Talks.” May 31, 2005. <http://news.bbc.co.uk/2/hi/asia-pacific/4592881.stm>.
- . “Q&A: South China Sea Dispute.” June 27, 2012. <http://www.bbc.co.uk/news/world-asia-pacific-13748349>.
- . “Profile: Bob Dudley.” September 30, 2012. <http://www.bbc.co.uk/news/business-10755184>.
- Barber, Lionel, Neil Buckley, and Catherine Belton. “Laying down the law: Medvedev vows war on Russia’s ‘legal nihilism.’” *Financial Times*, December 24, 2008. <http://www.ft.com/intl/cms/s/0/e46ea1d8-c6c8-11dd-97a5-000077b07658.html#axzz27n6dI9Ob>.
- Barbieri, Katherine, and Omar Keshk. Correlates of War Project Trade Data Set Codebook, Version 3.0 (2012). <http://www.correlatesofwar.org/COW2%20Data/Trade/Trade.html>.
- Belton, Catherine. “Gazprom Pays \$770m for TNK-BP Gas Field.” *Financial Times*, March 1, 2011. <http://www.ft.com/intl/cms/s/0/1f0c62da-43fe-11e0-8f20-00144feab49a.html#axzz25nmXEUuZ>.
- Belton, Catherine, and Guy Chazan. “Shtokman Exit Shows a Realistic Gazprom.” *Financial Times*, August 29, 2012. <http://www.ft.com/intl/cms/s/0/b6c8cf9c-f1f8-11e1-bba3-00144feabdc0.html#axzz25nmXEUuZ>.
- Bennett, Mia. “Russia, Like Other Arctic States, Solidifies Northern Military Presence.” *Foreign Policy Association*. July 4, 2011. <http://foreignpolicyblogs.com/2011/07/04/russia-arctic-states-solidifying-northern-military-presence/>.

- Bird, Kenneth J., Ronald R. Charpentier, Donald L. Gautier, David W. Houseknecht, Timothy R. Klett, Janet K. Pitman, Thomas E. Moore, Christopher J. Schenk, Marilyn E. Tennyson, and Craig J. Wandrey. "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle." U.S. Geological Survey Fact Sheet 2008–3049 (2008).
<http://pubs.usgs.gov/fs/2008/3049/>.
- Blacksmith Institute. "North Sakhalin."
<http://www.blacksmithinstitute.org/projects/display/74>.
- Borgerson, Scott G. Statement before the Committee on Foreign Affairs, House of Representatives. Washington, D.C. March 25, 2009.
- Bradshaw, Michael. "Sakhalin-2 in the Firing Line." *Pacific Russia Oil and Gas Report* (Winter 2006): 3–18.
http://www.geog.le.ac.uk/staff/mjb41/articles/Sakhalin2_in_the_Firing_Line_Env.pdf.
- Brooks, Stephen G. *Producing Security: Multinational Corporations, Globalization, and the Changing Calculus of Conflict*. Princeton: Princeton University Press, 2007.
- Bryanski, Gleb. "Russia to Get Stronger Nuclear Navy, Putin Says." *Reuters*, July 30, 2012. <http://www.reuters.com/article/2012/07/30/us-russia-putin-navy-idUSBRE86T1D320120730>.
- Bukharin, Oleg. "Russia's Nuclear Icebreaker Fleet." *Science and Global Security* 14 (2006): 25–31. http://www.princeton.edu/sgs/publications/sgs/pdf/14_1_25-31_Bukharin.pdf.
- Bush, George W. "National Security Presidential Directive/NSPD 66 and Homeland Security Presidential Directive/HSPD 25." The White House. January 9, 2009.
<http://www.fas.org/irp/offdocs/nspd/nspd-66.htm>.
- Bynkershoek, Cornelius Van. *De Dominio Maris Dissertatio*. Translated by Ralph van Deman Magoffin. New York: Oxford University Press, 1923.
- Byers, Michael. "Canada Can Help Russia with Northern Sea Route." *The Moscow Times*, June 8, 2012. <http://www.themoscowtimes.com/opinion/article/canada-can-help-russia-with-northern-sea-route/460127.html>.
- . *Who Owns the Arctic?: Understanding Sovereignty Disputes in the North*. Vancouver: D&M Publishers Inc., 2009.

- Byers, Michael and Suzanne Lalonde. "Who Controls the Northwest Passage?" *Vanderbilt Journal of Transnational Law* 42 No. 4 (October 2009), 1133–1210. Nashville: Vanderbilt University, 2009.
- Carroll, Lewis. *Alice's Adventures in Wonderland and Through the Looking Glass*. London: J.M. Dent & Sons Ltd., 1961.
- CBC News. "Denmark Defends List of Nations for Arctic Meeting." May 20, 2008. <http://www.cbc.ca/news/canada/north/story/2008/05/20/arctic-meeting.html>.
- . "Harper Announces Northern Deep-Sea Port, Training Site." August 11, 2007. <http://www.cbc.ca/news/canada/story/2007/08/10/port-north.html>.
- Le Cercle Polaire, "The (Political) Opening of the Northern Sea Route," *Le Cercle Polaire* (October 2009), http://www.lecerclepolaire.com/En/newsviews/route_du_nord_news.html.
- Champion-Smith, Bruce. "Arctic Sovereignty 'First Priority' for North, Says Harper." *The Star*, August 23, 2010. <http://www.thestar.com/news/canada/arctic/article/851309--arctic-sovereignty-first-priority-for-north-says-harper>.
- Charron, Andrea. "The Northwest Passage in Context." Canadian Ministry of National Defense. July 14, 2008. <http://www.journal.forces.gc.ca/vo6/no4/north-nord-02-eng.asp>.
- Chazan, Guy, and Catherine Belton. "Gazprom Freezes Arctic Gas Project." *Financial Times*, August 29, 2012. <http://www.ft.com/cms/s/0/ab331568-f1d8-11e1-bba3-00144feabdc0.html#axzz25TbNBGVU>.
- Clark, Pilita, and Gillian Tett. "Russia Found Failing on Pollution Curbs." *Financial Times*, January 23, 2012. <http://www.ft.com/intl/cms/s/0/f7585e52-45e5-11e1-acc9-00144feabdc0.html#axzz25nmXEUuZ>.
- Clover, Charles. "Russia Faces End of Petrodollar Surplus." *Financial Times*, October 3, 2012. <http://www.ft.com/intl/cms/s/0/313c4ffc-0d6e-11e2-bfcb-00144feabdc0.html#axzz2BUBXmMY5>.
- Cohen, Ariel. "From Russian Competition to Natural Resources Access: Recasting U.S. Arctic Policy." *Backgrounder*, No. 2421 (June 15, 2010).
- . "Russia in the Arctic: Challenges to U.S. Energy and Geopolitics in the High North." In *Russia in the Arctic*. Edited by Stephen J. Blank, 1–42. Carlisle: Strategic Studies Institute, 2011. <http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB1073.pdf>.

- Coffey, Luke. "NATO in the Arctic: Challenges and Opportunities." *Issue Brief* No. 3646. June 22, 2012. The Heritage Foundation. <http://report.heritage.org/ib3646>.
- Cornell University Law School, Law Information Institute. S.v. "*opinio juris*." http://www.law.cornell.edu/wex/opinio_juris_international_law.
- Dalvo, Giovanni D. "Northern Fleet in Russia's Grand Strategy." *Window on Heartland: Geopolitical notes on Eastern Europe, the Caucasus and Central Asia Blog*. June 28, 2012. <http://www.windowonheartland.net/search?updated-max=2012-07-05T09:02:00%2B02:00&max-results=1&start=1&by-date=false>.
- Dickie, Mure. "Senkaku Spat Reinforces Military Rethink." *Financial Times*, September 25, 2012. <http://www.ft.com/intl/cms/s/0/ec105b12-06f1-11e2-92ef-00144feabdc0.html#axzz28AV6GjID>.
- Dosch, Jörn. "The Spratly Islands Dispute: Order-Building on China's terms?" *Harvard International Review*. August 18, 2011. <http://hir.harvard.edu/the-spratly-islands-dispute-order-building-on-china-s-terms>.
- Dow Jones Newswires. "Russia Denies Plans to Carry Out 'Unilateral Partition' of Oil-Rich Arctic." September 23, 2008. http://www.rigzone.com/news/article.asp?a_id=67031.
- The Economist. "The Scramble for the Seabed: Suddenly, a Wider World below the Waterline." May 14, 2009. <http://www.economist.com/node/13649265>.
- Ekos Research Associates Inc. *Rethinking the Top of the World: Arctic Security Public Opinion Survey*. Toronto: University of Toronto, 2011. <http://munkschool.utoronto.ca/files/downloads/FINAL%20Survey%20Report.pdf>.
- European Commission. "China: Bilateral Trade Statistics." March 21, 2012. http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113366.pdf.
- Gaddy, Clifford D. and Barry W. Ickes. "Russia after the Global Financial Crisis." *Eurasian Geography and Economics* 51, No. 3 (2010): 281–311. doi: 10.2747/1539-7216.51.3.281.
- Galloway, Gloria. "Harper Stands Firm on Sovereignty as China eyes Arctic Resources." *The Globe and Mail*, August 26, 2011. <http://www.theglobeandmail.com/news/politics/ottawa-notebook/harper-stands-firm-on-sovereignty-as-china-eyes-arctic-resources/article616967/>.
- Gartzke, Erik. "The Capitalist Peace." *American Journal of Political Science* 51, no. 1 (January 2007): 166–191.

- Gayathri, Amrutha. "Anti-Japanese Protests Erupts across China; Beijing Raises Trade Threats over Disputed Islands." *International Business Times*, September 17, 2012. <http://www.ibtimes.com/print/anti-japanese-protests-erupts-across-china-beijing-raises-trade-threats-over-disputed-islands-789678>.
- GlobalSecurity.org. "Arctic Ocean." <http://www.globalsecurity.org/military/world/war/arctic.htm>.
- Ghosn, Faten and Glenn Palmer. "Codebook for the Militarized Interstate Dispute Data, Version 3.10." April 14, 2003. <http://www.correlatesofwar.org/>.
- Ghosn, Faten, Glenn Palmer, and Stuart Bremer. "MID3 Data Set, 1993–2001: Dispute Narratives, Version 3.0." March 25, 2004. http://www.correlatesofwar.org/COW2%20Data/MIDs/MID_v3.0.narratives.pdf.
- . "The MID3 Data Set, 1993–2001: Procedures, Coding Rules, and Description." *Conflict Management and Peace Science* 21 (2004):133–154, <http://correlatesofwar.org>.
- Grove, Thomas. "Russia Creates Two Brigades of Arctic Troops." *Reuters*, July 1, 2011. <http://uk.reuters.com/article/2011/07/01/russia-arctic-troops-idUKLDE76017D20110701>.
- . "Russia to Submit U.N. Arctic Claim Next Year." *Reuters*, July 7, 2011. <http://www.reuters.com/article/2011/07/07/us-russia-arctic-claim-idUSTRE76528320110707>.
- Government of Canada. "The John G. Diefenbaker National Icebreaker Project." August 28, 2008. <http://pm.gc.ca/eng/media.asp?id=2252>.
- . "Arctic/Offshore Patrol Ships." January 13, 2012. <http://www.forces.gc.ca/site/pri/2/pro-pro/artic-eng.asp>.
- Harding, Luke. "Vladimir Putin Calls for Arctic Claims to Be Resolved under UN Law." *The Guardian*, September 23, 2010. <http://www.guardian.co.uk/world/2010/sep/23/putin-arctic-claims-international-law>.
- Hookway, James. "Philippine Warship in Standoff with China Vessels." *The Wall Street Journal*, April 11, 2012. <http://online.wsj.com/article/SB10001424052702303815404577336550439399694.html?mod=googlenews>.
- Howard, Roger. "Russia's New Front Line." *Survival* 52, 2 (2010): 141–156. doi: 10.1080/00396331003764678.

- Huebert, Rob. "The Newly Emerging Arctic Security Environment." *Canadian Defence & Foreign Affairs Institute* (March 2010).
<http://www.cdfai.org/PDF/The%20Newly%20Emerging%20Arctic%20Security%20Environment.pdf>.
- Humphreys, Adrian. "New Proposal Would See Hans Island Split Equally between Canada and Denmark." *National Post*, April 11, 2012.
<http://news.nationalpost.com/2012/04/11/new-proposal-would-see-hans-island-split-equally-between-canada-and-denmark/>.
- Hurst, Cindy. "Investment Risky in Russia as Politics Affects Profits." *Oil and Gas Journal* 105, no. 27 (July 2007): 18–23.
- Ibbitson, John. "Dispute over Hans Island nears Resolution. Now for the Beaufort Sea." *The Globe and Mail*, January 26, 2011.
<http://www.theglobeandmail.com/news/politics/dispute-over-hans-island-nears-resolution-now-for-the-beaufort-sea/article563692/>.
- IHS Janes. "Danbjørn Class," and "Thorbjørn Class." *Janes Fighting Ships* (Jane's Information Group, 2011). <http://www.janes.com>. (Accessed March 2, 2012).
- . "Navy (Denmark)." *Jane's Sentinel Security Assessment – Western Europe* (IHS Global Limited, 2012). <http://www.janes.com>. (Accessed March 2, 2012).
- "The Ilulissat Declaration." May 28, 2008.
http://www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf.
- Isted, Kathryn. "Sovereignty in the Arctic: An Analysis of Territorial Disputes & Environmental Policy Considerations." *Journal of Transnational Law & Policy* 18 No. 2 (Spring 2009), 343–376. Tallahassee: Florida State University, 2009.
http://www.law.fsu.edu/journals/transnational/vol18_2/isted.pdf.
- Jackson, William D. "Encircled Again: Russia's Military Assesses Threats in a Post-Soviet World." *Political Science Quarterly* 117, 3 (Autumn 2002): 373–400.
- Japan Ministry of Defense. *Defense of Japan 2012*. Tokyo: Japan Ministry of Defense, 2012. http://www.mod.go.jp/e/publ/w_paper/2012.html.
- Kaczynski, Vlad M. "U.S.-Russian Bering Sea Marine Border Dispute: Conflict over Strategic Assets, Fisheries and Energy Resources." In *Russian Analytical Digest* 20. May 1, 2007. <http://www.css.ethz.ch/publications/pdfs/RAD-20-2-5.pdf>.
- Koivurova, Timo and Kamrul Hossain. *Offshore Hydrocarbon: Current Policy Context in the Marine Arctic*. Arctic Transform Program. September 4, 2008. <http://arctic-transform.org/download/OffHydBP.pdf>.

- Kovalchuk, Vladislav. "Russian Oil Sector Taxation: Federal Budget Wealth or Oil Sector Health?" BNP Paribas Investment Partners. December 10, 2011.
http://www.tkb-bnpparibasip.info/i_eng/msg_i/140//p1112021_russian_budget_oil_v3.pdf?941.
- LaGrone, Sam. "Todd Pacific Shipyards Wins \$16m Icebreaker Modification Contract." *Jane's Navy International* (HIS Global Limited, 2011). January 14, 2011.
<http://www.janes.com>. (Accessed March 2, 2012).
- Lassere, Frédéric. "High North Shipping: Myths and Realities." In *Security Perspectives in the High North: Geostrategic Thaw or Freeze?* NDC Forum Paper 7. Edited by Sven G. Holtsmark and Brooke A. Smith-Windsor, 179–199. Rome: NATO Defense College, 2009.
- Leitzell, Katherine. "Is Arctic Sea Ice Back to Normal?" *Arctic Ice News and Analysis*. National Snow and Ice Data Center. May 29, 2012.
<http://nsidc.org/icelights/2012/05/29/is-arctic-sea-ice-back-to-normal/>.
- Lindberg, Marten. "Is NATO taking over the Arctic?" *ISN Blog*, August 22, 2012.
<http://isnblog.ethz.ch/international-relations/is-nato-taking-over-the-arctic>.
- Martins, Sebastião. "Russia Ramps Up Modernisation of Oil-Refining Sector." *Oil & Gas Technology*, August 10, 2012. <http://www.oilandgastechology.net/business-strategy/russia-ramps-modernisation-oil-refining-sector>.
- McRae, Don. "The Negotiation of Article 234," in *Politics of the Northwest Passage*. Edited by Franklyn Griffiths. Kingston: McGill-Queen's University Press, 1987.
- Medvedev, Dmitry. "Osnovy gosudarstvennoi politiki Rossiiskoi Federatsii v Arktike na period do 2020 goda i dal'neishuyu perspektivu." Security Council of the Russian Federation. September 8, 2008.
<http://www.scrf.gov.ru/documents/98.html>.
- . "Speech at Meeting of the Russian Security Council on Protecting Russia's National Interests in the Arctic." The Kremlin. September 17, 2008.
http://archive.kremlin.ru/eng/text/speeches/2008/09/17/1945_type82912type82913_206564.shtml
- . "Strategiya natsional'noi besopasnosti Rossiiskoi Federatsii do 2020 goda." Security Council of the Russian Federation. May 12, 2009.
<http://www.scrf.gov.ru/documents/99.html>.

- Mehdiyeva, Nazrin. "The Three Ds: Development, Diversion, and Diversification – Reviewing Russia's Energy Strategy to 2030," NATO Defense College Research Review (November 2011), <http://www.ndc.nato.int/download/downloads.php?icode=309>.
- Ministry of Energy of the Russian Federation. "Energy Strategy of Russia for the Period up to 2030." Decree No. 1715-r of the Government of the Russian Federation dated 13 November 2009. [http://www.energystrategy.ru/projects/docs/ES-2030_\(Eng\).pdf](http://www.energystrategy.ru/projects/docs/ES-2030_(Eng).pdf).
- Monaghan, Andrew. "From Lisbon to Munich: Russian Views of NATO-Russia Relations." NATO Defense College Research Report (February 2011). <http://www.ndc.nato.int/download/downloads.php?icode=238>.
- Murphy, Kim. "Coast Guard Beefs Up Deployment in the U.S. Arctic." *Los Angeles Times*, March 1, 2012. <http://www.latimes.com/news/nation/nationnow/la-na-nn-coast-guard-arctic-20120301,0,3177903.story>.
- National Intelligence Council. "Scarcity in the Midst of Plenty?" *Global Trends 2025: A Transformed World*. Washington, D.C.: U.S. Government Printing Office, 2008. <http://www.aicpa.org/research/cpahorizons2025/globalforces/downloadabledocuments/globaltrends.pdf>.
- National Research Council. "Summary for Congress." *Polar Icebreakers in a Changing World: An Assessment of U.S. Needs*. Washington, DC: The National Academies Press, 2007.
- National Snow and Ice Data Center. "Arctic Ice 101." <http://nsidc.org/icelights/arctic-sea-ice/>.
- . "Arctic Sea Ice Shatters All Previous Record Lows." http://nsidc.org/news/press/2007_seaiceminimum/20071001_pressrelease.html.
- . "Sea Ice Trends in Extent." ftp://sidads.colorado.edu/DATASETS/NOAA/G02135/Sep/N_09_plot.png.
- The National Academies. *Polar Icebreakers in a Changing World: An Assessment of U.S. Needs*. Washington, DC: The National Academies Press, 2007.
- NATO. "Bucharest Summit Declaration." April 3, 2008. http://www.nato.int/cps/en/natolive/official_texts_8443.htm.
- . "NATO-Russia Council." October 27, 2010. http://www.nato.int/cps/en/natolive/topics_50091.htm.

- NATO-Russia Council. "Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation signed in Paris, France." May 27, 1997. <http://www.nato-russia-council.info/en/official-documents/official-document-03/>.
- Nepolitano, Diana. "Ministry of Finance of the Russian Federation Expert Meeting on Oil and Gas Taxation." ITIC Bulletin Special Edition. July 2011. Washington, DC. http://www.iea.org/work/2011/tax_russia/Moscow_bulletin.pdf.
- Newsroom America. "Island Dispute between China, Japan Escalates." September 12, 2012. http://www.newsroomamerica.com/story/286673/island_dispute_between_china_japan_escalates.html.
- Northern Oil and Gas Branch of Aboriginal Affairs and Northern Development Canada. "Northern Oil and Gas Annual Report 2011." Government of Canada (2012). <http://www.aadnc-aandc.gc.ca/eng/1335971994893>.
- Northern Pacific. "Russia May Lose One Alaska More." http://www.npacific.ru/np/magazin/1-98_e/np5002e.html.
- Oceanographer of the Navy. *U.S. Navy Arctic Roadmap*. Washington, DC: Department of the Navy, 2009. http://www.navy.mil/navydata/documents/USN_artic_roadmap.pdf.
- Ollivant, Simon. "Arctic Challenge to NATO." In *Conflict Studies* 172. London: The Institute for the Study of Conflict, 1984.
- O'Rourke, Ronald. *Changes in the Arctic: Background and Issues for Congress*. CRS Report for Congress, June 15, 2012. Washington, DC: Congressional Research Service, 2012. <http://www.fas.org/sgp/crs/misc/R41153.pdf>.
- Pate, Chad P. "Easing the Arctic Tension: An Economic Solution." Master's thesis, Naval Postgraduate School, December 2010.
- Pharand, Donat. "Freedom of the Seas in the Arctic Ocean." *The University of Toronto Law Journal* 19, 2 (Spring, 1969): 210–233.
- Putin, Vladimir. "Being Strong: Why Russia Needs to Rebuild Its Military." *Foreign Affairs*. February 21, 2012. http://www.foreignpolicy.com/articles/2012/02/21/being_strong.
- Reuters. "FACTBOX-Key Facts about Russia's Kovykta Gas Field." June 1, 2007. <http://www.reuters.com/article/2007/06/01/russia-kovykta-idUSL0128180320070601>.

- . “UPDATE 1-Putin Says Russia Lost Patience with Kovykta Owners.” June 4, 2007. <http://www.reuters.com/article/2007/06/04/russia-kovykta-putin-idUSL0439713820070604>.
- RIA Novosti. “Lomonosov Ridge Could Bring Russia 5 Billion Tons of Extra Fuel.” October 4, 2007. http://www.energy-daily.com/reports/Lomonosov_Ridge_Could_Bring_Russia_5_Billion_Tons_Of_Extra_Fuel_999.html.
- . “Putin Criticizes NATO as Cold War Throwback.” October 5, 2012. http://en.rian.ru/mlitary_news/20121005/176426452.html.
- Rosneft. “Rosneft and ExxonMobil to Join Forces in the Arctic and Black Sea Offshore, Enhance Co-operation through Technology Sharing and Joint International Projects.” August 30, 2011. <http://www.rosneft.com/news/pressrelease/30082011.html>.
- Russett, Bruce. *Grasping the Democratic Peace: Principles for a Post-Cold War World*. Princeton: Princeton University Press, 1993.
- Sapir, Jacques. “Russia Regional Report: Business as Usual, Despite the Financial Crisis.” *World Oil Online*, 323, No. 1 (January 2011). <http://www.worldoil.com/Business-as-usual-in-Russia,-despite-the-financial-crisis-January-2011.html>.
- Senate Committee on Foreign Relations. Convention on the Law of the Sea. S. Exec. Rept. 110–9 (2007).
- Statistics Bureau. *Statistical Handbook of Japan 2012*. Ministry of Internal Affairs and Communications, Japan. <http://www.stat.go.jp/english/data/handbook/index.htm>.
- Studin, Irvin. “The Melting of the Polar Ice Signals the End of ‘Pax Arctica.’” *Financial Times*, August 30, 2012. <http://www.ft.com/cms/s/0/01e312ce-f1f1-11e1-bba3-00144feabdc0.html#axzz28U0XxHn0>.
- Trent, Packard C. “An Evaluation of the Arctic – Will It Become an Area of Cooperation or Conflict?” Master’s thesis, Naval Postgraduate School, 2011.
- Truman, Harry S. Proclamation 2667. “Policy of the United States with Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf.” 10 *Federal Register* 12,305 (September 28, 1945).
- United Nations. “Agreement on Arctic Cooperation.” January 11, 1988. <http://treaties.un.org/doc/publication/unts/volume%201852/volume-1852-i-31529-english.pdf>.

- . “Agreement between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary.” June 1, 1990.
<http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/USA-RUS1990MB.PDF>.
- . “Charter of the United Nations.” Chapter VII, Article 51. June 26, 1945.
<http://www.un.org/en/documents/charter/intro.shtml>.
- . “Declarations and Statements under Articles 287, 298 and 310 of the United Nations Convention on the Law of the Seas.”
http://www.un.org/Depts/los/convention_agreements/convention_declarations.htm.
- . “The Territorial Sea Geographical Co-ordinates (Area 7) Order.” September 10, 1985.
http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/CAN_1985_Order.pdf.
- . “Treaty between the Kingdom of Norway and the Russian Federation Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean.” September 15, 2010.
<http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/NOR-RUS2010.PDF>.
- . “Treaty on Conventional Armed Forces in Europe.” November 19, 1990.
<http://treaties.un.org/doc/Publication/UNTS/Volume%202443/v2443.pdf>.
- . “United Nations Convention on the Law of the Sea.” December 10, 1982.
http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf.
- U.S. Coast Guard. “Daily Chronology of Coast Guard History.”
http://www.uscg.mil/history/Chron/Chronology_Aug.asp.
- U.S. Department of State. “Limits in the Seas, No. 112: United States Responses to Excessive Maritime Claims.” March 9, 1992.
<http://www.state.gov/documents/organization/58381.pdf>.
- U.S. Geological Survey. “90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic.” July 23, 2008.
<http://www.usgs.gov/newsroom/article.asp?ID=1980>.

- U.S. Government Accountability Office. “Coast Guard: Observations on Arctic Requirements, Icebreakers, and Coordination with Stakeholders.” Testimony Before the Subcommittee on Coast Guard and Maritime Transportation, Committee on Transportation and Infrastructure, House of Representatives. December 1, 2011. <http://www.gao.gov/assets/590/586574.pdf>.
- U.S. Library of Congress. Congressional Research Service. *Permanent Normal Trade Relations (PNTR) Status for Russia and U.S.-Russian Economic Ties*, by William H. Cooper. CRS Report RS21123. Washington, DC: Office of Congressional Information and Publishing, June 15, 2012. <https://www.fas.org/sgp/crs/row/RS21123.pdf>.
- U.S. Senate. Committee on Foreign Relations. Convention on the Law of the Sea. S. Exec. Rept. 110–9 (2007).
- UPI.com. “Canada Goes Ahead with Arctic Patrol Ships.” July 25, 2011. http://www.upi.com/Business_News/Security-Industry/2011/07/25/Canada-goes-ahead-with-Arctic-patrol-ships/UPI-40851311626012/.
- Vasilyeva, Nataliya. “Russia, Canada in Rivalry over Arctic Resources.” *Associated Press*, September 16, 2010. <http://www.signonsandiego.com/news/2010/sep/16/russia-canada-in-rivalry-over-arctic-resources/>.
- Whipple, Tom. “Peak Oil Review – September 5.” *Energy Bulletin*, ASPO-USA, September 5, 2011. <http://www.energybulletin.net/print/58771>.
- “Whose Hans?” Canadian Geographic Enterprises (2005), <http://www.canadiangeographic.ca/hansIsland/default.asp>.
- Yakovleva, Yana. “Medvedev’s Battle against Legal Nihilism.” *The St. Petersburg Times*, January 26, 2010. <http://www.sptimes.ru/story/30693>.
- Young, Oran R. “Canada and the United States in the Arctic: Testing the ‘Special Relationship.’” *Northern Perspectives* 15, No. 2 (May–June 1987). <http://www.carc.org/pubs/v15no2/2.htm>.
- Zyśk, Katarzyna. “Russia and the High North: Security and Defense Perspectives.” In *Security Perspectives in the High North: Geostrategic Thaw or Freeze?* NDC Forum Paper 7, edited by Sven G. Holtsmark and Brooke A. Smith-Windsor, 102–129. Rome: NATO Defense College, 2009.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. NORAD-USNORTHCOM/J2
Attn: RDML Brett Heimbigner, USN, Director of Intelligence
Attn: CDR Michael Lupow, USCG (Ret.), Chief, Arctic Branch
Peterson AFB
4. Joint Chiefs of Staff/J28
Attn: Col. William Gray
Attn: Mr. Richard Gareau
The Pentagon
Washington, DC
5. Joint Chiefs of Staff/J8
Attn: Mr. Thomas Allen
The Pentagon
Washington, DC
6. Chief of Naval Operations, OPNAV N2/N6I
Attn: RDML Norm Hayes
Attn: RDML Matt Kohler
The Pentagon
Washington, DC